

THE SINGING VOICE AND ITS
TRAINING

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THE SINGING VOICE AND ITS TRAINING

By

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ETC.



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PREFACE

IN presenting this little volume I must tender my thanks to the Proprietors of the *Strand Magazine*, by whose kind permission I have been enabled to include the chapter on "The Art of Expression," which I wrote for the pages of that publication some four years ago.

I must also thank the Proprietors of *Cassell's Magazine*, by whose courtesy I have embodied in this book the material, which under the title "The Voice and its Training" I contributed to the October number in 1908.

M. S. M.

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FOREWORD

THE SINGER AND HIS ART

MANY centuries ago there lived a certain sculptor, by name Pygmalion. While he was working, he came one day across a piece of marble more beautiful than any he had ever seen before. As he gazed at it, there flashed suddenly across his mind a wondrous inspiration. Filled with enthusiasm, he entered on his self-appointed task. As day by day beneath his cunning hand the rough-hewn mass began to take human shape, so day by day did his delight grow keener. On he worked, week after week, in tireless energy, bringing all his skill and brain to bear upon the task, and ever keeping before his eyes that ideal perfection which had come to him like an inspired dream, when he had first seen the marble.

At last the moment of triumph was attained. One more touch brought his labours to an end. The statue was finished!

It was the figure of a woman, graceful beyond description, and with a beauty that enslaved whoever gazed thereon. The sculptor was lost in wonder, as his every sense drank in that perfection which challenged comparison with the Gods themselves. Galatea all but lived! Then as he looked at his handiwork, he began to make lamentation. O that Galatea could move! O that she were no longer of cold, hard stone! O that she might live! Forthwith he raised his arms in supplication, and at last—so the story runs—the Gods were moved to grant his wish. As a reward for his divine conception they warmed that icy bosom with the breath of life, and so, as he closed his eyes and moved his lips in that silent pleading for the fulfilment of his soul's desire, a voice answered from afar off, and called him by name, "Pygmalion!" Again he heard the long-drawn wail, calling

him in louder tone, "Pygmalion!" Yet a third time his name was sounded, but now so close as to make him fancy that some new presence had entered the room. With a start he opened his eyes, and lo! he saw the marble move, the arms stretch towards him, and the figure descend from the pedestal. His creation was no longer lifeless stone—Galatea lived in very truth!

.

The fable is singularly applicable to the Art of Singing. Whosoever is gifted with a voice of naturally fine quality may deem himself thrice fortunate. But let him not think that there is no need for training or for the acquirement of Art, else he would be in the position of Pygmalion, had the sculptor on coming upon his piece of marble exclaimed: "What a beautiful piece of stone: really, it would be a pity to touch it. I will leave it just as it is in its natural state, and call my friends to the studio to admire it." Had he done that, there

would have been no statue at all, merely a piece of rough-hewn stone.

But Pygmalion was an artist. He had ambitions, he had imagination, he was a dreamer of dreams; and he had the skill, the cunning of hand by which he could embody those dreams of his in some solid material, so that they might become visible to his fellow-men. That was where he showed himself the artist.

Now, though Pygmalion wrought his statue from the finest marble, did those who came to the studio to see what he had done exclaim immediately, "What a fine piece of marble"? No: Galatea appealed to them because of the exquisite beauty of pose and the delicate workmanship. That the marble was the medium in which the artistic conception had been crystallised was a fact of only secondary importance. Had the figure been fashioned out of common clay, would the artistic value have been greatly diminished? Surely not.

So therefore let not the singer err in

thinking that, because Nature has bestowed on him a magnificent organ, there will be no need for work. He must study carefully, under the guidance of a teacher who is qualified to impart to him not merely voice-emission and the technical side of the training, but Phrasing, Expression, Knowledge of Style and all that goes to make up the Art of Singing. The technical and æsthetic principles must go hand in hand, for, as Signor Randegger very truly says: "The greatest mechanical efficiency is cold and lifeless without the animating spirit, while no æsthetic beauty could possibly exist apart from a perfect command over technical resources."

As regards the technical side of the training, the singer's aim must be to overcome all faults of actual "emission" or Voice-production, to use the word which is so much in vogue at the present day—a word which could never be mentioned with impunity within hearing of Manuel Garcia, since it

was sure to evoke an outburst of disgust. "Voice-production?" he would say. "There is no such thing as voice-production. Voice-emission, yes. You can emit your voice, but how can you produce it? Can you take it in your hand and say, 'There it is: look at it! admire it! Is it not a beautiful voice?' *Non!* Can you pour it out like molten lead into the sand so that your friends can gaze on it? *Non!* You cannot produce your voice."

The singer must acquire absolute command over his breath and make his voice irreproachable in intonation, firm, strong, flexible, extended. He must eliminate all roughness and unevenness of quality, and must evolve smoothness, lightness, grace, precision, and refinement. He must, in fact, seek to acquire Perfection of Intonation, Steadiness of Sound, and Beauty of Timbre, which are laid down by Manuel Garcia as the tripod of voice-emission.

THE SINGER'S QUALIFICATIONS

THE SINGING VOICE

CHAPTER I

THE SINGER'S QUALIFICATIONS

How many people there are who would consider the question "What are the qualifications of a singer?" sufficiently answered by a monosyllable—"Voice."

The response is singular from more points of view than that of the grammarian. Its brevity is the soul of witlessness. The story is told of a certain famous painter putting the following question to a simple-minded youth, who had announced his intention of studying as an artist.

"What do you consider it necessary for a man to possess if he is to become an artist?"

The would-be pupil answered promptly: "Oh, paints and—er——"

“ Yes ? Paints and——”

“ Something to paint on.”

“ And is that all ? ” queried the great man, with a smile.

“ Oh dear no ; of course he would need brushes.”

Scarcely less simple-minded is he who considers “ Voice ” to be the complete equipment for a singer. If anyone enters on a musical career with voice alone—*Vox et præterea nihil*—he will find himself in an uncommonly poor plight. If he begins his career—save the mark—relying entirely on a voice, he will from the very first be absolutely subservient to the slings and arrows of outrageous climate, at any rate as far as England is concerned. A touch of cold affects the beautiful quality of the instrument on which he has staked his all—and where is he ? Again, as years pass by, his instrument begins to show signs of wear and his day is over. The poet might well have had in mind this—“ maker of notes ”—what else can one call him ?—when he wrote the lines :—

“ La vie est brève,
Un peu d’espoir,
Un peu de rêve,
Et puis bonsoir ! ”

How different is the case of him who is not merely a maker of notes but a real singer! As he grows older, his art increases, and, as his art increases, so does he become less and less dependent on his instrument. Nature suffers with the passing of years—Art, never; or if one must qualify the “never,” Art never suffers until the arrival of extreme old age brings with it the physical incapacity to express any longer the artistic knowledge, which remains still unimpaired. It is a trite saying that the poor workman complains of his tools. Truly it might be said that the skilled workman, as far as any art is concerned, becomes almost independent of his tools. He rises above his material. He glories in setting himself limitations, that his art may triumph over the obstacles.

Did not G. F. Watts paint a picture without using any brush at all, applying the colour to his canvas by means of a *patella*—a little ivory stick used for the mixing of colours?

Did not Henry Irving deliberately produce *Madame Sans Gêne*, so that he, a tall man, might undertake the rôle of the short Napoleon, and by the various resources suggested by his own intellectuality make the eyes of the

audience tell them that he too was short, though their brains told them that his stature was really unaltered? Or, again, in the case of instrumental music, does not the violinist delight in adding to his repertoire the "Chaconne" of Bach, so that he may surmount the difficulties of being deprived of all pianoforte accompaniment or orchestral support. And in the art with which we are here concerned, who would not wish to sing the "Monotone" of Cornelius (in which the voice is restricted to the same note throughout the song), so that he might appeal to his hearers by his power of light and shade and by his expression without relying on any added beauty of vocal melody.

One might set down a hundred similar instances showing how the artist rises above his materials and delights in setting himself limitations that he may overcome them by his art.

The comparative insignificance of material to the artist is true of every branch of art. Take, for instance, two pictures by one of the old masters—pictures of equal artistic merit, but in the one case painted on a slightly larger canvas. Conceive anyone saying, "Yes—those pictures

are wonderful. This one is worth £10,000, and that one — well, the canvas may have cost perhaps a little more, and the extra amount of space will have taken a certain amount of extra paint, so that the value of the picture is £10,001."

If the singer has a magnificent voice of naturally beautiful quality, let him always bear in mind that this Heaven-sent gift can only give him *lasting* superiority over another artist with a voice slightly inferior to his own, when all else is equal. I say particularly "lasting" superiority, for the reason that exceptional beauty of voice will very possibly for a time ensure greater popularity and success to the inartistic singer. After a few seasons, however, the real artist is bound to take the higher position over the mere singer with a voice *et praeterea nihil*, and, as time goes on, this superiority will make itself increasingly evident.

The musical profession is indeed strewn with the shipwrecks of those who trusted in voice alone. It was, I think, Sir Joseph Barnby who once said: "A singer requires a hundred things to be perfect: if she possesses ninety-eight of them, she is a star of phenomenal brilliancy,

the greatest singer of her day." A hundred things! *vox et praeterea*—ninety-nine other things.

Has anyone ever possessed those other ninety-nine things which go to make the Perfect Singer? No!

The mere negativeness of the answer suggests at once certain qualifications. Art knows no finality. No one can attain to absolute perfection. Yet everyone must strive to attain it. As soon as an artist is completely satisfied with his work, *ipso facto* he ceases to be an artist.

So then the singer needs ambition, enthusiasm, and tireless energy. He can never know enough. Work! Work! Work! Study! Study! Study! Cultivate Stick-to-it-iveness, as it has been called.

I remember Sir Charles Santley once saying: "When I came back from my studies in Italy, I sang to one of the greatest musicians of that day. After listening to my efforts, he nodded and remarked: 'Yes, that is very good, very good indeed! But you have still a few things to learn.' That was some forty years ago, and at the present day I find that there are not merely a few but a good many things which

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may still be learned." That is the position of the true artist.

The qualifications of a singer would appear to fall into three divisions: the Physical, the Intellectual, and the Temperamental. And the greatest of these? I should be very much inclined to say the Temperamental.

I do not say that all the following are absolutely necessary, but they may certainly be reckoned among Barnby's "Century."

1. PHYSICAL QUALIFICATIONS

The two primary necessities are, of course, voice and ear. Without voice a singer would be like a painter without paints. Without ear he would be in as parlous a state as a painter without eyes.

The voice must be there, for, no matter what may be said to the contrary, no teacher can bring a voice into existence. He can show a pupil how to use the voice properly, and he can improve it by means of various exercises, he can instruct how it may be shown off to the best advantage, but he cannot create a voice. He is like a diamond-cutter, who given a rough

diamond, can polish and cut it till it shines with all the brilliancy that lay hidden under its rough surface, but cannot take a piece of clay and polish and cut that till it shines with the dazzling lustre of the diamond.

The ear is doubly necessary, first for regulating pitch and thus enabling any one to sing in tune; secondly, for hearing and reproducing the various *timbres* of the voice. The habit of listening critically to one's own voice and to the voices of others is of the utmost importance. Absolute pitch (that is to say, the power of naming any notes when heard) is luckily unnecessary, for it is a gift which nature has bestowed on very few. A sense of relative pitch (that is to say, the taking of intervals from any particular note) can be cultivated and the ear be trained into correcting faulty intonation, as well as into hearing the subtle differences of quality in voices, which to the untrained ear might be imperceptible. But where a singer cannot at will take any note (assuming it to be within easy range) struck on the piano, and instead sings a note three or four tones distant, it may be doubted whether it is worth spending time in cultivating the

necessary ear. In any case it will require a great exercise of patience on the part of the pupil, and even greater on the part of the teacher.

But let us pass on to some other physical qualifications necessary to the singer.

Physical strength, good health, power of endurance and moderate habits are one and all necessary, whether it be on stage or concert platform that a career is chosen. There are the late hours, the lengthy rehearsals, the tiring railway journeys, draughty dressing-rooms, together with the climatory conditions, snow, rain and cold. Last, but not least, a good presence is, if not indispensable, at any rate of valuable assistance, with the fair sex especially.

2. INTELLECTUAL QUALIFICATIONS

Intellectual qualifications fall under two headings: musical and general.

A. Musical.—A singer must be a good musician in the broadest sense of the word. Not only must he be able to sing *correctly* (which includes being a fine timist and a good sight reader, the latter a qualification of the

greatest value), but he must play the piano, study harmony, and cultivate a wide knowledge of the best music, vocal and instrumental. He must have broad tastes and avoid that tendency to narrowness of vision, which is one of the seven deadly sins of a musician.

B. General. — As to general intellectual qualifications, he must acquire a good education in the broadest sense of the word, for truly Knowledge is Power. He must devote special attention to the study of languages—French, German, and Italian. Here again the Ear comes in, for the acquirement of pronunciation calls for the exercise of a very delicate imitative faculty. Again, he must be cultured, and should make himself *en rapport* with the sister Arts, with Literature (especially Poetry), Painting, Sculpture, and the Drama. Then, too, he should go through a course of acting and reciting, for the singer is concerned with the interpretation of the poet, and the dramatic realisation of his inmost feeling, no less than with that of the composer.

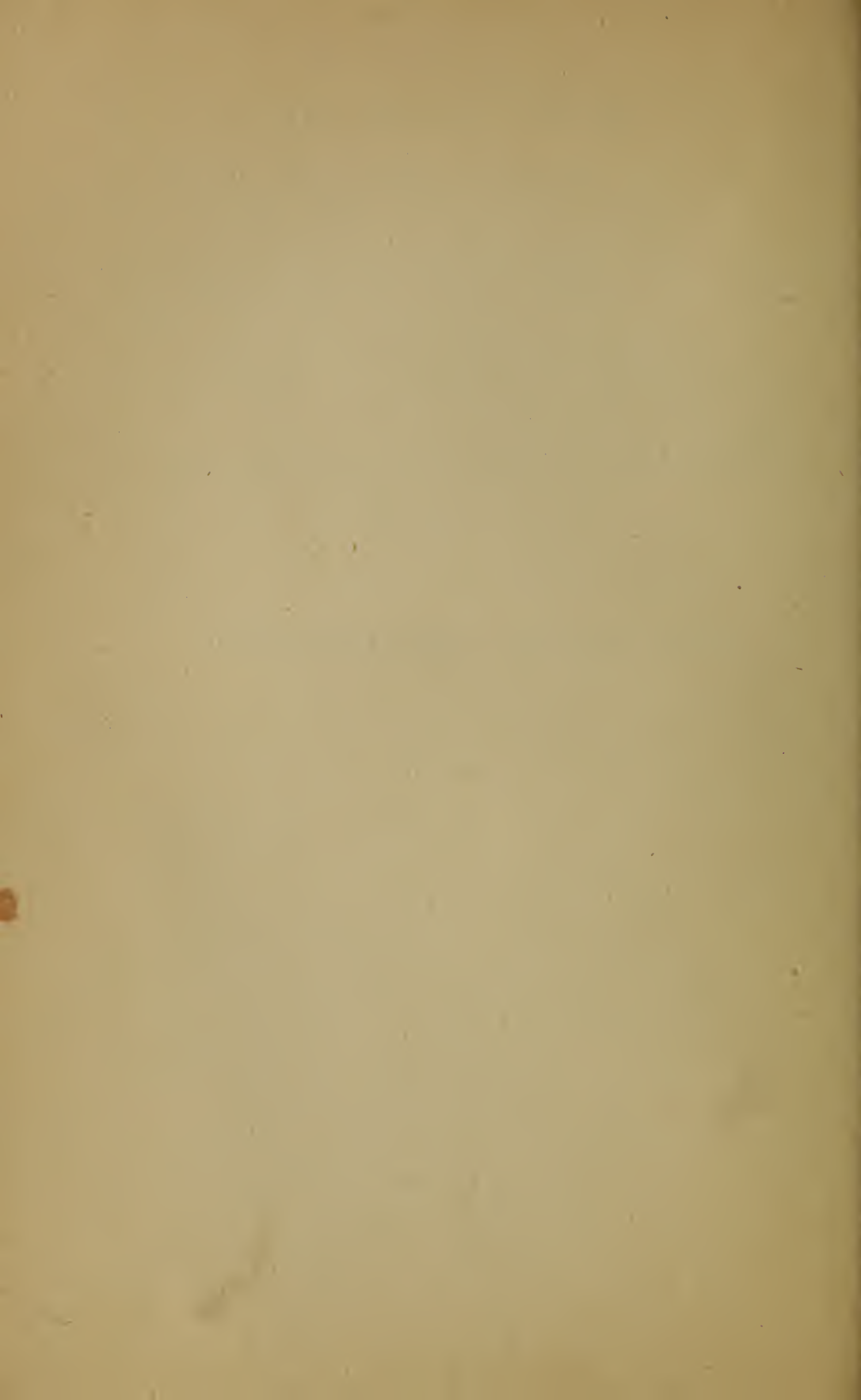
3. TEMPERAMENTAL QUALIFICATIONS

Lastly, we come to the temperamental qualifications, which I take to include personal magnetism and charm, depth of feeling, the warm sympathy of the heart, instinctive imagination, and soul. All of these things must be born in one, they constitute one's "ego." They may be on the surface or they may lie dormant, waiting to be awakened by contact with life, by the experiencing of joy, sorrow, pain. Here again the teacher can awaken, stimulate, arouse, guide, mould, improve and bring out, but he cannot create *l'étincelle* where it does not already exist, any more than he can create a voice.

But though the teacher can do much to arouse and stimulate all these temperamental qualities, the singer can do much himself, and for this reason he should not seek to shut himself off from his fellow-creatures. The hermit may become a scholar, but it is by contact with our fellow-creatures, by taking our place in the battle of life, instead of shirking our responsibilities, that those feelings are awakened in us which strike the sympathetic chord in the hearts

of others. The singer, therefore, must be a humanitarian, and must have broad sympathies, meeting his fellow-men and joining in their joys and sorrows. He must be a sensitive plate, on which are constantly being photographed the moods of those with whom he is brought into contact. If he seeks to go through life with his eyes shut and his soul encased in a coat of mail, he will never become a great artist.

THE VOCAL INSTRUMENT



CHAPTER II

THE VOCAL INSTRUMENT

IN learning to sing, the first essential is that we should clearly understand the mechanism of the vocal instrument and the theoretical inter-working of its various parts. Our instrument consists of four distinct *apparati*, which, though combining their action during the singing of a musical phrase, have each their special functions and are each independent of the rest : the Lungs, the Glottis, the Pharynx, and the Articulatory organs. The practical working of these four parts I shall deal with later. I am only at the present moment concerned with the theoretical working of them.

1. THE LUNGS

The Lungs are to a voice, what the bellows are to an organ. When the bellows of an organ have been completely emptied of air, there will be no tone forthcoming unless fresh air is

introduced into them, to be in its turn converted into tone. The other parts of the instrument are useless without it. In the same way unless we introduce air into our lungs we cannot make any sound. The lungs are our bellows, the foundation of all tone. Hence the immense importance of proper breathing to the singer.

The lungs are situated inside the chest, one on each side, being enclosed in a sort of cage consisting of the twenty-four ribs, the breastbone and the backbone, while they are separated from the digestive organs by the diaphragm. One may think of this muscle as dome-shaped, something like an inverted basin. The diaphragm holds the act of respiration under its immediate control.

When the breath leaves the lungs, it passes up the windpipe until it reaches the larynx, or, as it is commonly called, Adam's apple. Here nature has placed the second part of the vocal instrument.

2. THE GLOTTIS

The Glottis transforms into sound the breath, which up to this point has been without sound. How does the glottis affect this change?

Before answering this question we must consider another. How is sound produced? All sound is produced by vibrating air. If the vibrations are irregular the result is noise, if they are regular there is produced musical sound. I am using here the term "musical" in its widest sense. That is to say, by musical sound, I mean any actual note: not necessarily a note which is musical in *timbre*.

In the case of a stringed instrument what happens is this. The string, being made to vibrate by the movement of the bow across it, swings backwards and forwards with regular movements, which cause a musical sound as opposed to "noise," which would result from irregular movements. As the string moves forward it condenses the air in front of it, while the air behind it undergoes expansion and becomes rarified. The string then swings back, moves forward once more, condensing the air again, and so on. The condensed air and the expanded air combine to form a wave of sound. These sound waves follow each other, setting the surrounding air in motion and finally strike on the drum of our ear, thus giving us the sensation which transmitted to

our brain conveys what we know as musical sound.

In the case of the vocal instrument the action is somewhat different. The Glottis, situated inside the Larynx, consists of two lips, the vocal cords, which for our purpose may be looked on as two india-rubber bands. When these are held completely open, the air passes through them without interruption and is soundless, in the same way that it is when we are breathing. When we wish to sing, these two lips fly together to meet the air which is to be expelled from the lungs. The air pushes them open, and they then close up quickly after letting a little puff of air through. The air once more pushes them open, once more they close after letting a second little puff of air through. And so the process goes on. These regular puffs of air form sound waves, just as the movement of a stringed instrument does, and set the air in motion in a similar way, finally reaching our ears with regular waves.

The pitch of the notes depends on the rapidity of the regular vibrations. The more rapid the vibrations are, the higher the pitch of the note will be, while by a law of acoustics the octave

of a note is produced by exactly double the rapidity of waves, or, as one more usually puts it, by double the number of vibrations. When, therefore, the air from the first part of our instrument, the Lungs, has passed through the second, the Glottis, it has been converted into musical sound of a certain pitch. As soon as it has passed this point it comes under the influence of the third part of the vocal instrument, the Pharynx.

3. THE PHARYNX

By this is meant the cavity at the back of the mouth and the channel leading downwards to the larynx. It is at this point that the note, whose pitch has already been determined in its passage through the glottis, receives its quality, vowel-sound, and *timbre* as we call it. Every alteration in the shape of the pharynx makes an alteration in the quality of the tone. For instance, we shall find later that the slightest swelling at the base of the tongue will at once produce what we recognise as a throaty, guttural quality.

Lastly, the air which is now a tone of definite pitch and definite quality, or vowel-sound,

reaches the fourth part of the instrument, the Articulator.

4. THE ARTICULATOR

By this word I designate the organs of the mouth, the lips, the tongue, the teeth, which intercombine one with another or join with the roof of the mouth or the back of the throat to form an obstruction, complete or incomplete, which we call a consonant.

Here, then, we have roughly the facts of our instrument. Let me recapitulate them once more, since it is of the greatest necessity that all should be clear. The lungs are filled with air, which, on being expelled, encounters the lips of the glottis, forces its way through these with greater or lesser regular rapidity in puffs of air, thereby acquiring pitch, passes through the tube formed by the throat, pharynx, tongue, and soft palate, thereby acquiring quality and vowel-*timbre*, and finally meets with certain obstructions from the organs of the mouth, which form the consonants and co-operate with the vowel-sounds in making words.

In conclusion, there are three fundamental

laws of acoustics on which, as Stockhausen has pointed out in his book on singing, the foregoing facts rest scientifically.

This is what he says on the subject:—

(1.) The *rate* of the vibrations decides the *pitch* of the note, the vocal cords directed by the ear producing the tension necessary for the required intonation, that is to say, for the pitch of the note.

This law has to do with purity of tone, tension of muscles and their control, sustaining the voice, carrying and uniting tones, execution of ornaments, and exercises in general.

(2.) The *amplitude* of the vibrations decides the *power* of the note. The lungs according to the quantity of air they expire giving greater or lesser amplitude to the vibrations: that is to say, greater or lesser power and intensity to the tone.

This law is dynamic—a computation of power. Each modification of tone, whether stronger or weaker, must be dependent on the well-regulated activity of the lungs. We cannot execute any *crescendo*, *diminuendo*, or *messa di voce* (swelled - and - diminished note) without this measure of power.

(3.) The *form* of the vibrations decides the quality of the note.

This law is concerned with *timbre*, and in combination with the second law results in what we call "Expression."

The cavity of articulation changes the form of the vibrations by the varying position of the tongue, lips, or soft palate, and results in the various vowel-sounds. Technique in the art of singing depends on the proper treatment of these parts, the singer's aim being to produce on any vowel, with clearness and beauty, notes of different pitch, register and quality with varied degrees of force, and to give to every feeling its right expression.

THE LUNGS

CHAPTER III

THE LUNGS

THE act of breathing consists of two distinct processes. First we *inhale*, taking air into our lungs, secondly we *exhale*, expelling the air from our lungs. These processes being distinct, must be considered separately. With regard to inhaling, it is no good attempting to make any decision as to the best method to adopt, before we have determined exactly *what* we want subsequently to do with the air after it has been inhaled. For instance, is the aim of the singer in the question of breathing the same as that of an athlete?

What does an athlete want to do? He wants to make either a single abnormal effort, as in throwing the hammer, or a series of abnormal efforts for a certain period of time as in rowing. He wants to exercise great muscular exertion, and when once it is accomplished he is unconcerned with immediate after-results. He does not care how visible his exertions are, and

expects to suffer from a certain amount of fatigue, collapse, and prostration afterwards. What does he do then? He finds the best results are obtained by cramming his lungs with air almost to bursting point.

If the singer has the same aims as an athlete he will find it necessary to do as the athlete does—cram his lungs to bursting point, and indulge in violent breathing exercises, even though they bring in their wake a buzzing in the head, and a feeling of faintness.

The singer's aims, however, so far from being the same as those of an athlete, are almost diametrically opposed to them. The singer wishes to sing with ease, with as little actual effort as possible, and with an utter absence of any visible effort, and he certainly does not want to make abnormal efforts, nor does he wish to exhaust himself at the end of a song, as the runner does at the end of a race.

So, then, it follows that there is no need to cram our lungs with air. Whatever breathing we do must be gentle, not laboured—natural, not abnormal. We require to breathe deeply, have complete control of the breath, with entire absence of visible effort, and the minimum

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amount of actual effort. Clearly there must be no laboured gasping for air, no noise whatever, no raising of the shoulders or heaving of the chest. Nor is this all, for though the singer must breathe deeply and fill the lungs well, he must once and for all abandon the idea that the aim of the singer is to *fill* his lungs as full of air as possible. For if he *did* cram them with air in this way, what would be the result? He would find himself overburdened; he would feel a certain suffocation, a desire to get rid of some air before commencing to emit any tone. In fact, he would *not* be able to have his breath under complete control.

Now there are three alternative possibilities in the way of inhaling.

(a) The lower ribs being kept immovable, the lungs may be expanded entirely upwards, the cage of ribs, which we call the chest, rising and falling with each inhaling and exhaling of the air. (Clavicular breathing.)

(b) The lower ribs still being kept immovable, the lungs may be expanded entirely downwards. (Abdominal breathing.)

(c) The lower ribs being allowed to move freely, the lungs may be expanded partially upwards, partially downwards, and partially outwards. (Intercostal breathing.)

Let us test these by the important principles which every singer strives to follow: the maximum of breath with the minimum of effort and the perfection of control. As far as the maximum of breath is concerned, it has been scientifically shown that the third alternative gives the best result. I could set down figures on the subject, but it is hardly necessary to do so here.

The first method is the worst of the three to adopt, for reasons which can be quickly shown. Not only does it result in less lung expansion than either of the others, but it involves greater effort, since the entire cage of the chest has to be lifted with each intaking of the breath, in order to afford room for the lungs to expand upwards. Moreover, it makes the proper control of the breath impossible. The breath *should* be controlled by the diaphragm, whereas in this case any control that there is, must come from above, within the larynx—a method not only radically wrong, but fraught

with evil results on the purity of the tone. In addition to this the clavicular breathing, which raises the collar-bone, draws the larynx rapidly down and lets it rise with equal suddenness when the voice is emitted. The restless state in which the larynx is thus kept is fatal to the development of the voice and of technique in general.

What of the second method of inhaling? Nothing can be urged against it on the score of breath control, and as regards the amount of air which can be inhaled, there is not really so very much to choose between it and the third alternative, but—yes, there is a distinct *But*. It is on the question of minimum effort that this compares unfavourably with the third. In this so-called abdominal breathing there is a good deal of effort involved, owing to the deliberate and forcible displacement of the various organs contained in the lower part of the body. Not only is this breathing somewhat laboured, particularly if carried on for any length of time (as in the case of a heavy Wagnerian rôle, for instance), but it is apt to set up indigestion and other internal disorders.

It is, therefore, the third alternative which

will be found most advantageous for the singer to adopt. In this so-called intercostal breathing he must remember not only to have the lower ribs free to expand, but also to relax the abdominal muscles so that the lungs may expand downwards a certain amount. This way of breathing is, in fact, one in which all tightening of muscles is avoided. It may be added here that for the repose of the larynx this diaphragm and rib breathing is indispensable.

What exactly happens when we take our breath in this third way? Garcia describes it thus in his book:—

“In the first attempt to emit a sound, the diaphragm flattens itself, the stomach slightly protrudes, and the breath is introduced at will by the nose, by the mouth, or by both simultaneously. During this partial inspiration, the ribs do not move, nor are the lungs filled to their full capacity, to obtain which the diaphragm must and does contract completely. Then and only then are the ribs raised, while the stomach is drawn in. This inspiration—in which the lungs have their free action from side to side, from front to back, from top to bottom—is complete, and is called intercostal. To obtain it, the breath must be taken slowly and deeply.”

+ This, then, is the general method of breathing

which should be adopted; and there are some further points to be noted in this connection, as to certain faults for which the singer must be on the watch. (All the old Italian schools were agreed that the singer's breathing should be slow, gentle, and deep, and the *Faults* in breathing come from neglect of these principles.

(1.) *Hasty breathing*.—Never be in a hurry. In early practices always bear in mind that the first consideration is to breathe properly. If there is not time in a song for a slow, full, deep breath, do not attempt a full deep breath, but take a half breath.

(2.) *Noisy breathing*.—A great point to be borne in mind by the singer is that his breathing should be imperceptible, and obviously if there is noise, it is impossible for the listener to fail to perceive it. To cure any fault we must first understand its cause; for by removing the cause, we do away with the ill effect. (The noisy breathing is caused by the vocal cords not being held apart. In ordinary breathing (apart from singing), by a natural automatic process, which is quite subjective and requires no thought, we open our vocal cords wide, when we wish to inhale. It is

only when we begin to lose consciousness that this action ceases to be controlled automatically, with the result that stertorous breathing ensues. So when in singing our breathing is noisy, it simply means, that we have been in too much of a hurry to gasp in a fresh supply of breath, and so have commenced inhaling before the vocal cords have automatically opened. What happens? The cords are sucked together by the rush of air and make an irregular series of vibrations, an unmusical sound, a noise. To correct it, then, we must avoid over-hurry, and must try to imitate what we do in ordinary life.

The only time when it is permissible for the respiration to be audible, is when it is desired to express great emotion, but this effect must be used most sparingly, and there are very rare occasions on which it is needed.

(3.) *Shallow breathing*.—This is simply a result of not carrying out the instructions for deep intercostal breathing. We must remember always that singing requires far more breath than ordinary speaking (I do not mean public speaking), and we must acquire the *habit* of taking deep breaths. It is as easy in singing

to acquire good habits as bad ones, and once acquired, good habits are just as hard to lose. This false way of breathing, in which the shoulders rise as if they were about to expand like wings, not only tires the throat but makes a most disagreeable impression upon the audience.

(4.) Raising the shoulders.—This is a fault for two reasons, firstly, because it breaks the canon that breathing should be imperceptible; secondly, because it means that our breathing is not intercostal, or even abdominal, but that worst of the three methods of breathing, the clavicular.

(5.) Pushing out the abdomen.—Our taking in of breath is a theory of freedom and *relaxation*. We leave the ribs free to expand as they will, and we merely relax the abdominal muscles so that the lower part of the body sinks of its own weight, the waist expands, and the lungs swell in those directions in which there is least effort. To push the abdomen out deliberately is not relaxing muscles, but tightening muscles, and hence should be avoided.

(Before leaving the subject of inhaling there are two points on which it is well to touch.

correct
nature
or
monthly
breathing

The first of these is the question, how far the singer should rely on the nostrils in breathing, and how far on the mouth.

In everyday life it is found best for the health to make a practice of breathing entirely through the nostrils, for the reason that the air is purified and warmed before reaching the throat and the lungs. Now it is a well-known fact that it is necessary for the throat and the air to be well warmed, in order to produce the best tone. That is why at a concert or during an operatic performance the voices of the artists seem to improve as the evening goes on, since the atmosphere of the hall is constantly rising in temperature.

The singer would therefore seem to have a good reason for inhaling entirely through the nose, while he would find a further argument for doing so from the fact that breathing constantly through the mouth inclines to dry the throat and to make the voice husky. *Theoretically*, then, the course would seem clear to the singer: breathe entirely through the nostrils and keep the mouth closed during inhaling. But can this theoretically admirable course be safely adopted *in actual practice*? Only partially, for to take

a full, deep breath entirely through the nostrils is a comparatively lengthy process, whereas during a song the time allowed for taking in breath is strictly limited by the length of the rests. For this reason the singer, while bearing the theoretical advantages in mind, will find himself in practice almost debarred from taking in breath entirely through the nostrils. What he will probably find feasible is this. Before commencing his song he may inflate his lungs slowly through the nose, and between the verses he will be able to repeat the process. At other places, unless there happens to be a four-bar rest (even this must be qualified, owing to the varied *tempi* of the music which he may be singing), he will find it necessary to inhale through the mouth almost entirely.

The second point in connection with inhaling is this. In the last section I had to qualify the statement that breathing should be entirely through the nose: in this one I must qualify the statement that all breathing should be intercostal, with the diaphragm fully contracting and the ribs expanding. In the practice of exercises, this method should be invariably adopted. When we come to songs, however,

we are faced with the difficulty that at some places at which we require to replenish our breath, we find that there is not sufficient time to take a full breath.

It may be taken as a general rule that a full breath can only be taken at the beginning or the end of a phrase (a phrase usually consisting of 4, 8, 12 or 16 bars). If we require any additional supplies before the phrase is completed, we must resort to half breaths, which are only intended for the partial replenishing of the supply, not for filling the lungs completely. In these half breaths we do not attempt to move the ribs or to contract the diaphragm completely. We only carry out the early part of the full intercostal breathing, as already described.

“The diaphragm flattens itself, the stomach slightly protrudes, and the breath is introduced at will by the nose, by the mouth, or by both simultaneously. During this partial inspiration the ribs do not move.” Thus we see that for the short half breath, diaphragmatic breathing is sufficient, whereas for the full breath rib-breathing is indispensable.

THE LUNGS—(*Continued*)

CHAPTER IV

THE LUNGS—(*Continued*)

IN exhaling there are two important rules to be remembered : (1) to sing with as little breath as possible ; (2) to sing with absolute steadiness of tone.

1. TO USE LITTLE BREATH

When the lungs have been completely filled the tendency with everyone is to let the breath come out with an uncontrolled and often unsteady rush at the beginning of the phrase, and the concluding notes of the passage become weaker and weaker with the lessening of the breath. This fault we must carefully guard against. The breath must be kept under the most complete control throughout, and at the start we must restrain it, instead of allowing it to run away with us. As the well-known singing teacher, Shakespeare, has well put it—

“When the breath is under full control, the result is a frank and fearless attack and a looseness of the instrument, together with a sense of the importance of leaving off every phrase with some controlled breath to spare. The goal has been reached when the last note of a phrase is as good as the first, and the singer is ready to refill at once and inaudibly.”

Young students are almost always anxious to use great intensity of breath, and the longer they study, the more they come to realise the mistake of doing so, for they discover that they can sing both audibly and effectively with a very small amount of breath as long as it is ~~sustained~~ steadily, and not given out in jerks.

With the middle and lower notes of the voice the necessary effect can be obtained with an extraordinarily small pressure of breath, provided always that proper use is made of the pharynx. Naturally, the higher we ascend in the scale, the greater will be the amount of breath necessary, and this for the obvious reason that the octave of a note is the result of double the number of vibrations. Hence we shall find, that as we sing upwards in a register we have to exert greater pressure and sustain more, and as we sing downwards in a register

we exert less pressure and have increasing relaxation.

2. TO SING WITH ABSOLUTE STEADINESS OF TONE

The necessity of this cannot be too strongly impressed on the singer. Failure to comply with it will result in one of two faults, (a) a series of tone waves of constantly varying intensity, which in aggravated cases have almost the effect of a sawmill; (b) tremolo, a wobbling on and around the note which is disastrous to all good singing. The former tendency is mainly found among exponents of the German school, the latter amongst those of the French school of singing.

The tremolo is looked on in the Italian school as one of the worst possible faults, and may result from any one of the following four causes :—

(1.) *Elongated uvula*.—The cure for this cannot be effected by the singing teacher, but relief must be sought from medical treatment.

(2.) *Fatigue*.—This, too, is an abnormal condition, and the cure is simple. Rest the voice completely for a time, since the trouble has arisen from singing too much, unless, of course,

the voice has been used wrongly, and so been strained.

(3.) *Affectation*. — Certain exponents of the French school of singing deliberately affect the tremolo, and look on it as a method of expression. How it originated I remember Garcia once relating.

“There had been at one time,” he said, “an eminent vocalist worshipped by the Parisian public. His voice was beautiful in quality, faultless in intonation, and absolutely steady in emission. At last, however, he began to grow old. With increasing years the voice began to shake. But he was a great artist. Realising that the tremolo was a fault, but one which could not then be avoided, he brought his mind to bear upon the problem before him. As a result, he adopted a style of song in which he had to display intense emotion throughout. Since in life the voice trembles at such moments, he was able to hide his failing in this way by a quality of voice which appeared natural to the situation.

“Now the Parisians did not grasp the workings of his brain, and the clever way in which he had hidden his fault. They only heard that in every song which he sang his voice trembled. At once, therefore, they concluded that, if so fine an effect could be obtained, it was evidently something to be imitated. Hence the singers

deliberately began to cultivate a tremolo. The custom grew and grew until it became almost a canon in French singing."

(4.) *Unsteady breathing*.—Tremolo which is caused by this last can be eradicated, if only the pupil will give his mind to it and carry out instructions. It requires, however, the exercise of indomitable will-power. The cure consists in first of all practising sharp staccato notes within an easy compass, and in later taking single sustained notes of quite short duration, with gentle emission of the breath, keeping the notes steady and varying their force, singing alternately *mf* and *piano*. When these notes can be given successfully without trace of tremolo, gradually make them of longer duration, until finally long sustained notes and exercises can be given with the desired firmness.

In conclusion, for the general improvement of breathing and for the acquirement of the necessary complete control, there are four exercises which students will find of great assistance. With five or ten minutes devoted to their practice three or four times a day, a marked improvement will quickly show itself.

(a) Inhale slowly through a very small

opening of the lips, and then exhale freely.

- (b) Inhale freely and then exhale slowly from a very small opening of the lips.
- (c) Inhale freely and retain the breath for some ten seconds.
- (d) Having filled the lungs freely, exhale through a small opening of the lips, keeping the breath absolutely steady, first at a very gentle pressure, next at a medium pressure, then at as strong a pressure as possible, and lastly, starting gently, gradually increase to the maximum pressure, and then diminish again to the minimum.

By means of these exercises the student should be enabled to obtain that complete command over the management of breath-pressure, without which he will never be able to make much progress in the art of singing.

THE GLOTTIS

CHAPTER V

THE GLOTTIS

THE second part of our instrument consists of the vocal cords and the chink of the glottis. By the action of these the breath is converted into musical sound of definite pitch. Several important points have to be dealt with, and we may summarise these under the following six heads:—1. The Pitch of notes; 2. The Attack; 3. The Compass of voices; 4. The Classification of voices; 5. Intensity of tone; 6. Ringing and veiled notes.

The vocal cords, as we already know, are situated inside the larynx.

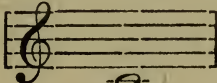
“If we look into the larynx from above,” writes Lee in his book, “whilst it is in a state of repose, we perceive flat, rectangular-shaped membranes or ligaments lying at each side of the box, and running in a direction from before backwards. These are the vocal cords. The upper or false cords will be found retracted on

the sides of the cartilage, so as almost to escape observation, and the true or lower ligaments (vocal cords) will be visible full and well developed, but relaxed, and leaving the chink or passage between them well opened for the free ingress and egress of the air. It will be further seen that they are attached in every portion to the sides of the box except at one edge—namely, that which is next the chink or passage for air, and which is therefore called the free edge—and that they are inclined to each other, that is, placed with regard to each other at an angle which prevents this free edge from being acted on or vibrating during ordinary breathing. The positions, however, as well as the degree of tension and relaxation of these membranes are regulated by certain little muscles attached to them and under the control of the will.”

As long ago as the eighteenth century, Ferrein designated the ligaments “vocal cords,” and this term has been generally used ever since; but it is badly chosen, for the voice is not a string instrument, the tone not being caused by the ligaments vibrating but by their opening and closing, so that to speak of vocal cords (a term which suggests vocal strings) is misleading. Besides this, the ligaments are flat and rectangular, and in no way resemble cords.

1. PITCH

As we have already seen, in considering this matter in Chapter II., the breath passing out through the larynx is cut up into a number of small puffs of air by the action of the vocal cords in coming together. If these puffs are regular and sufficiently rapid, there is sound; if irregular, there is noise. With the regular "puffs" a note of any certain pitch will be always produced by exactly the same number of vibrations, and can only be caused by that exact number. Take, for example, the *middle*

C of the piano  with 512 vibra-

tions. This means that the vocal cords will open and close 512 times in the second to produce a note of that pitch, while in the case of a violin or any other string instrument, the note will be produced by the string swinging backwards and forwards 512 times.

When the string is set in motion, it compresses the air on the side towards which it moves, while the air immediately behind it will be expanded in an amount equal to that which has been displaced in front. The two

portions of air thus acted on form a sound wave, and if the string continues to swing backwards and forwards with regularity of motion, the succession of waves thus formed will produce musical sound. As each of the waves reaches the ear, the compressed air presses the drum of the ear inwards, and the expanded air draws it out again. This causes a series of movements or vibrations of the membrane, which are transmitted to the brain by the auditory nerve, causing us to experience the sensation which we recognise as sound.

Now the violinist knows that with the violin properly tuned, he can always obtain any particular note by stopping a certain string at a definite point. Each time he stops the string at that point, he will be able, by passing his bow over it, to play a note of the same pitch. When, however, a vocalist wishes to sing any particular note, he has no such outward and visible method of doing it. What does he actually do? He imagines the note with precision when he is going to sing, and thus effects the correct tension of the vocal cords in a way unknown to us. This tension in combination with a particular pressure of breath

produces a note of the exact pitch. If he desires to put on a stronger pressure of breath, he will have to alter the tension of the cords, if he is to keep on the same note. It is in order that the singer may accustom himself to absolute certainty of pitch that the practice of staccato notes is so excellent a study, for where the note is of very short duration, there is no time to correct faulty intonation. One of the most distressing faults to listen to is that which is produced by a singer scooping up to his notes: that is to say, by his commencing each note flat and correcting the mistake subsequently by raising the pitch.

2. ATTACK

One of the most important things which a singer must strive to obtain is a correct method of attack. By this it is meant that he must learn to commence his notes in a proper way. For this reason the sustained notes should from the first be taken on simple vowel-sounds, *A* (*ah*), etc., instead of with a preliminary consonant, *La*, *Ma*. The latter method is, of course, easier for the beginner, but it is far better to conquer without delay the difficulty of the actual attack.

How is the proper attack to be obtained? The easiest, if not the only, way is by imitation. One may explain with accuracy the sensations aroused respectively by a correct attack, and by an incorrect one, but unless the teacher can illustrate with his own voice the correct and incorrect ways, it is difficult to see how the pupil is to obtain the desired result. This is only one of the many points in the training of the voice, which show the necessity of a singing teacher being able to sing well himself, for illustration plays an enormously important part in vocal teaching.

In considering the correct and incorrect methods of attacking a note, we have to bear in mind that a note is caused by two things acting in conjunction:—the pressure of air, and the opening and closing of the vocal cords.

Now there are three possibilities to be dealt with:—

- (1.) Some of the air may pass through the glottis before the vocal cords are brought together.
- (2.) The vocal cords may be brought together before the air begins to leave the lungs.

- (3.) The vocal cords may be brought together at the exact instant the air reaches the glottis.

Of these three methods of attack the first results in an aspiration of the vowel: instead of singing *A* (*ah*), we sing *Hah*. The second results in a hard click being heard before the vowel, and this too must be discarded. The third is the only correct method of attacking a note, and can hardly be shown except by the actual illustration. This attack must be given with a moderate expulsion of breath, with distinctness, and with freedom from harshness.

The question of attack cannot be concluded without allusion to the famous *coup de glotte*, with which Manuel Garcia's name is associated. Few expressions can have been so misused. How many singers and teachers have taken it to mean that the commencement of each note should be accompanied by a hard click (the second of the methods referred to above). Some have even held that Garcia intended a species of cough by the term. Yet nothing was further from his thoughts. All that he wished to imply by the phrase, *coup de glotte*,

was that the notes should be attacked with firmness and precision on the true and exact pitch, without any slurring, feeling for the note, or uncertainty of intonation. This he meant and no more, and he was the very first to deprecate any hardness of attack.

As a further guide he has written these words :
“L'énergie de l'attaque sera proportionnée au degré de force que l'on veut communiquer au son.”

3. COMPASS

The *lower limit* of a voice is defined by nature, and depends absolutely on the size of the vocal cords. The cords are enclosed in the larynx, and the more this grows, the bigger the cords become and the lower the voice drops. It will be found, for instance, that the possessor of a bass voice will necessarily have a far more protuberant larynx than a tenor, a contralto than a mezzo-soprano, and so on. The vocal cords may grow in both length and thickness, and it is the combination of these two that gives the bottom note of a voice.

This is analogous to the case of a string instrument in which we find, that the longer

the string is, which vibrates, the deeper is the note that is sounded, and in the same way the thicker it is, the deeper is the note.

It is in the fact of the voice sinking, when the vocal cords grow in length or in thickness (or both), that we find the explanation of a phenomenon which is well known—the breaking of a boy's voice. A boy has a voice similar in compass to that of a soprano or mezzo-soprano, which is only another way of saying that his vocal cords are of practically the same length and thickness as those of a soprano or mezzo. When a boy reaches the age of fourteen or fifteen, his voice breaks—that is to say, his larynx begins to grow and the vocal cords to lengthen and thicken. It takes a long time for this growth to be completed, and for the voice to settle down in its new conditions. When this has happened the speaking and singing voice will usually have dropped about an octave. If his voice as a boy was a very high soprano, it will probably become a tenor or high baritone, if it was an alto it will probably become a low baritone or a bass. I say "probably" and not "certainly," because there are exceptions to this rule. What his voice

becomes in manhood depends simply on the extent which the vocal cords grow.

While a boy's voice is undergoing this process of change, all singing should be stopped, otherwise there is a great risk of injuring the vocal cords, and of damaging the voice more or less permanently. A case in point was Manuel Garcia, who always attributed the breakdown of his singing voice, when still a young man, to his father having made him continue singing during the period of change.

Here again there are exceptions, such as Edward Lloyd, who, I believe, was able to go straight on with his singing professionally without any ill effect.

With a girl's voice there is not so much change. The voice takes on an extra fullness, and usually sinks in range, but the alteration is not nearly so marked as in a boy's voice. It may be reckoned that at about the age of fourteen or fifteen a girl should cease singing for quite eighteen months, and not until she is seventeen will she be ready to take up serious vocal study. But here again no exact time or age can be laid down, as the period varies with the degree of bodily development

of each individual, and with girls of the same age this varies to an astonishing degree.

As I have endeavoured to show, the bottom limit of the voice is absolutely fixed by nature as far as properly emitted notes are concerned. Notes effected by the undue relaxing of the cords may be ignored as being illegitimate effects, which could only harm the voice and give no satisfactory results.

The *upper limit*, on the other hand, is variable, depending, when the voice is properly emitted, primarily on the size of the vocal cords, secondarily, on that of the lungs and on the pressure of breath which can be obtained. The size of the vocal cords is defined by nature, and cannot be developed in any way, but the size of the lungs and the pressure of breath can be developed by certain exercises (which have been already set down in the chapter on the lungs), and by the proper training of the voice, which shows the pupil how to apply the pressure to the best advantage, and how to avoid wasting breath.

In the above paragraph I have particularly set down the words, "when the voice is properly emitted," and for this reason: It is quite

possible to emit notes higher than those which lie within the proper compass. The result is attainable by deliberately forcing the vocal cords to open and close more rapidly of themselves, instead of allowing the rapidity of their vibration to be the result of the pressure of the breath acting on them, when they are at a properly regulated tension.

It is precisely this phenomenon which occurs where a voice has been wrongly trained and turned into a so-called tenor, when intended by nature to be a baritone. But nature exacts a heavy penalty. The voice forced up in this way first begins to lose that all-precious velvety quality, which, once impaired, is rarely, if ever, to be recovered; next it begins to grow increasingly harsh, strained, and faulty in intonation, and finally there is a complete breakdown.

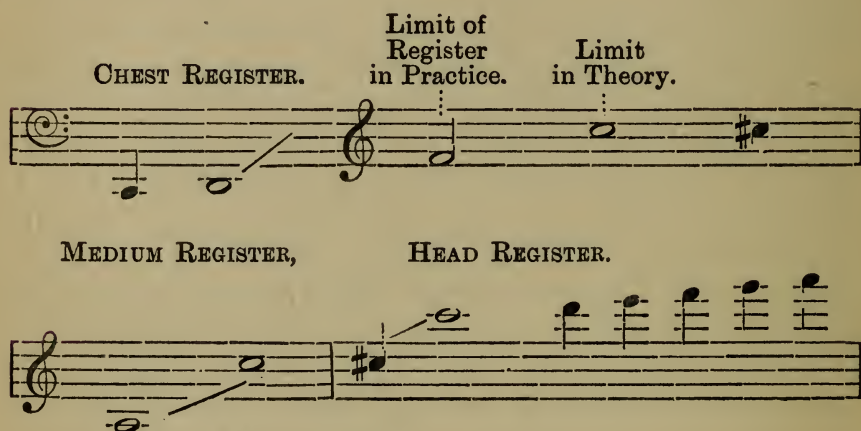
Nature does not, however, take this revenge without giving preliminary signals of distress, which may be clearly understood by those properly qualified to discern them. Of one thing a pupil may be very certain: if his throat begins to ache after he has been singing a few minutes, something is radically wrong. The results of misusing the voice may be quickly

seen by the laryngologist. Should the voice have been forced up beyond the natural height, the vocal cords become red and inflamed ; should the voice have been forced downwards, unnaturally low notes being taken, the cords become relaxed and lose their healthy light colour. The limits which nature sets to each voice are boundaries which cannot be overstepped with impunity.

We have seen on what the compass of a voice theoretically depends. What may be said to be the average compass of a human voice ? One may place the average compass of a fairly good voice at an octave and six notes. For those, however, who propose to enter the musical profession, something more than this is necessary, for the so-called "classical" compass adopted by all the older composers was a semitone under two octaves. In composing operas or oratorios they often wrote for one or more of those singers who were specially famous at the time, and in so doing they sometimes wrote *rôles* with a compass of as much as two octaves and a half (as, for instance, in the *Flauto Magico*, or *Semiramide*), but whenever they did so, they used to give alter-

native notes or passages which would confine the *rôle* to the classical compass if desired.

As to the combined extent of the human voices, though the following may be taken as generally accurate, exceptionally deep basses have been known to go lower, and exceptionally high sopranos to go higher, than the notes given at the two extremes.



THE GLOTTIS—(*Continued*)

CHAPTER VI

THE GLOTTIS—*Continued*

4. THE CLASSIFICATION OF VOICES

THERE are two popular ideas with regard to the classification of voices : first, that it depends entirely on the compass ; secondly, that, if the voice is male, it is either tenor, baritone, or bass, and if female, either soprano, mezzo-soprano, or contralto.

The popular idea with regard to both these matters is to a very large extent wrong. Voices are not so much to be distinguished by their compass as by the quality of their tone and by the *timbre* of their vowel-sounds. It is quite possible for two voices to have identically the same compass and yet to fall under quite different classifications ; especially is this the case with high baritones and low-pitched tenors. It is therefore essential for a singer to know

the capabilities of his voice, and to look not merely at the top note of a song, but at the bottom note, and at the general leaning of the melody.

The greater part of a song will usually be found to lie within a compass of a single octave, and it is necessary that this should correspond with that octave in his voice which is its general foundation. Songs and operatic rôles may suit lyrical light voices or more heavy dramatic voices, and the interchange of one with the other is ineffective for the song, and probably bad for the voice.

As to the general classification of voices, instead of the rough-and-ready "bass, baritone, tenor, contralto, mezzo-soprano, and soprano," the Italian classification is far more suited to the variations which are to be found among singers. I have indicated in most cases the full two octaves within which limits each voice may be said to lie.

<i>Basso profondo</i>	.	.	.	.	E to e'.
<i>Basso buffo</i>	.	.	.	.	F to f'.
<i>Basso cantante, or bass-baritone</i>	.	.	.	.	G to g'.
<i>Tenore-baritono</i>	.	.	.	.	A to a'.
<i>Dramatic tenor</i>	.	.	.	.	c to c''.
<i>Lyrical tenor</i>	.	.	.	.	d to c''.

<i>Contralto</i>	.	.	.	.	f to f''.
<i>Mezzo-contralto</i>	.	.	.	.	g to g''.
<i>Mezzo-soprano</i>	.	.	.	.	a to a''.
<i>Dramatic soprano</i>	.	.	.	.	c' to c'''.
<i>Light soprano</i>	.	.	.	.	d' to d'''.

As will be seen from the above list, there is a striking resemblance in compass between the corresponding divisions of male and female voices, and this resemblance is no less striking in regard to quality. As to pitch, the male voice will be found to lie exactly an octave lower than the corresponding female voice.

5. INTENSITY

Intensity of sound has often been confused by students with volume of sound. The two have, as a matter of fact, nothing whatever to do with each other; they result from the action of entirely different parts of the vocal instrument, and are effects which, though often combined, are still more often used quite separately. Thus we can sing a note which has medium volume and little intensity, or equally a note which has very little volume and very great intensity. It is important to realise this fact, and to learn to use the two mechanisms independently of each other.

Mezza-voce singing consists in using a fair amount of volume with very little intensity. On the other hand, in any very dramatic singing, where for the interpretation of phrases great strength of feeling is demanded during a *piano* or *pianissimo* passage of music, it is necessary to adopt the other method—great intensity with small volume. These are cases in which a change is made from the usual method of combining intensity and volume in equal amounts, such as little intensity and little volume for *pianissimo* effects, great intensity and great volume for *forte* and *fortissimo* effects.

The question now arises as to what causes intensity of sound, and what causes volume of sound.

(“The intensity of sound is not due to the amplitude of movement of the glottic lips, but to the quantity of air which makes one vivid explosion. The resistance offered by the lips to the pressure of the lungs determines this quantity, the amplitude is therefore a result, not a cause. After each explosion the glottis must be re-closed; for if the air found a constant issue, the greater the expenditure of air the weaker the sound would be.”)

Volume of sound, on the other hand, has nothing to do with either the pressure of air from the lungs, or with the movement of the glottic lips, but with the expansion of the pharynx.

How the varying intensity of sound comes about may be illustrated in figures. When we are about to sing a note we start emitting from the lungs a regular pressure of breath. Say we emit "X" amount of breath per second. While doing so, we mentally decide to sing a particular note—take, for the sake of argument, *middle C*. This takes 512 vibrations a second: that is to say, the amount of breath "X" is cut up by the tension of the vocal cords into a series of vibrations or puffs of air each $\frac{X}{512}$ in size. Now suppose that we suddenly double the amount of air, and emit "2X" per second. If we continue to emit puffs of air of the same size as before, $\frac{X}{512}$, we shall have to emit twice as many in the second: that is to say, the vibrations will be double as rapid, and this means that instead of singing *middle C* as before, we shall be singing the octave of the note. But suppose, instead of altering the pitch, when we double the

amount of air, we continue to sing the *middle C*? What happens then? Each puff of air will have to be twice as big as before, $\frac{x}{256}$ instead of $\frac{x}{512}$. As a result the note will have double the

intensity. In order to do this we have to alter the tension of the vocal cords.

Now let us suppose that instead of *suddenly* doubling the pressure of air, while we are singing the *middle C*, we *gradually* increase the pressure and keep on the same note? What happens? Gradually the puffs of air will be increased in size and the tone in intensity, while at the same time the tension of the vocal cords has to undergo gradual alteration.

As I have already mentioned, when in the ordinary way we sing a *piano* note, we have small intensity combined with small volume, and when we sing a *forte* note, we have great intensity combined with great volume. It will be seen from this that to sing a swelled-and-diminished note (starting *piano*, swelling to *forte*, and diminishing again to *piano*), we shall have to alter continuously the tension of the vocal cords throughout the note. It is for this

reason that Manuel Garcia always advised that swelled notes should not be studied until a pupil had done some considerable amount of other exercises. In this he was in opposition to many teachers, who would give to their pupils the swelled notes almost at the beginning of instruction. There can be little question as to who was in the right.

(It is possible to take a note with varying intensity, as we have seen, and for the practice of exercises it may be taken as a general principle that a pupil should make a habit of singing with as little intensity as possible, reinforcing the size of tone by increasing the volume (expanding the pharynx, or, to use a well-known phrase, singing with an open throat). Unless the singer cultivates this power of singing with small intensity, he can never attain to any great degree of rapidity in execution.

(In his *piano* singing he should have the minimum of breath, while his *forte* should be accomplished not by using the strongest possible pressure of breath, but rather by setting a comparatively small pressure of breath into the greatest possible vibration and resonance by the expansion of his pharynx.)

As for the *mezza-voce*, which is one of the greatest charms of the vocal art, this depends entirely on the power of singing with as little intensity of tone as possible. Though the best *mezza-voce* effects are to be obtained from the higher notes of the voice, it must not be thought that, because *mezza-voce* is employed most frequently on the upper notes, it is therefore only obtainable in the interval of the fifth or so at the top of the voice. It can be used throughout the voice, and should be cultivated through the whole range of the instrument. The tone is not so resonant as a powerful one, but it travels well, and is of a quality which is greatly prized by singers.

6. RINGING NOTES

The vocal cords by their action produce sounds which vary in pitch according to the rapidity of the movement. These sounds, however, may vary in character according to the manner in which the vocal cords are brought together. The sounds may either be ringing or veiled, and it is important that the singer should be able to produce either the one or the other

at will, as they play a considerable part in the matter of Expression in Singing. For instance, if we wish to give a passage with tenderness, we shall find it imperative to use veiled sounds, while anger demands equally imperatively the use of ringing sounds. As a general rule, it will be found that where our feelings are passionate, strung up or elated joy, the ringing sounds will be used; and where they are gentle, unstrung with fear, dejected, or broken down with grief, the veiled sounds will be chosen.

We know that a note consists of a series of regular explosions, the vocal cords coming together in between each. If the glottic lips close completely each time, the explosion will strike sharply on the drum of the ear and the sounds will be heard to be ringing. If, on the other hand, the cords do not close completely, there will be a slight escape of air, and the explosion will strike on the drum of the ear bluntly or blurred instead of sharply, the sounds becoming veiled.

It is obvious that with the veiled sounds a certain wastage of air is going on throughout the note. Consequently, if an exceptionally long phrase has to be sung, it will be preferable to

give it with ringing sounds instead of with veiled, as in this way the breath can be saved. But in so doing, it is necessary that music and words should admit of an expression which will allow of ringing notes.

In the same way the wastage of breath which takes place throughout a veiled sound makes it more difficult to sustain a very high note than would be the case with a ringing one.

In connection with these sounds an interesting experiment may be shown by means of a lighted match. First sing a veiled note, then a ringing one, to show the pupil the difference between the two. Next light the match, hold it before the mouth, and sing the ringing note again. The flame will not stir. But as soon as the note is changed to a veiled one, the flame will begin to flicker, until finally the note may be made so veiled that the light will be blown out.

The student should practise these two kinds of sound. First of all take them separately (singing a scale with the ring and repeating it in the veiled quality). Afterwards take a single sustained note, commencing it with the ring and gradually veiling it more and more,

till at last the note disappears altogether in a steady flow of breath. By doing this successfully, the singer will have advanced another step towards the complete management of his instrument.

REGISTERS

CHAPTER VII

REGISTERS

THE registers of the human voice are three in number, Chest, Medium, and Head. These names are apt to be deceptive. They are given to the three registers because in the case of the first the voice is felt to vibrate principally in the chest—almost as though it came from the chest, in fact; in the second it is felt to vibrate in the throat; in the third it is felt to vibrate in the head. The names, needless to say, have nothing whatever to do with the place where the different registers are formed, for every note in the human voice is formed in the larynx by the action of the vocal cords.

Manuel Garcia has defined the term “register” as—

“a series of consecutive homogeneous sounds produced by one mechanism, differing essentially from another series of sounds equally homo-

geneous produced by another mechanism, whatever modifications of *timbre* and of strength they may offer."

He continues to explain the mechanism of the registers in this way, and it would be impossible to improve on what he has written :—

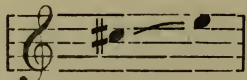
"When preparing to emit a sound the two sides of the glottis, which are separated in breathing, shut the passage, and if the sound be a deep chest note, they become slightly tense. The whole length and breadth of the lips (comprising the anterior prolongation of the arytenoid cartilage and the vocal cord) are engaged in the vibrations. As the sounds rise in the chest register, the tension of the lips increases and the thickness diminishes. Meanwhile the contact of the inner surfaces of the arytenoids will progress, and extend to the end of the vocal processes, thereby shortening the vibratory length of the lips. The medium or falsetto is the result of similar actions, save that the lips come into contact, not through their depth, but merely at their edges. In both registers the glottis has its length diminished from the back by the arytenoids, which advance their contact till their adhesion is complete. As soon as this takes place, the medium ceases, and the glottis consisting of the vocal cords alone, produces the head register. The resistance opposed to

the air by the large surfaces generates the chest register, and the feebler opposition presented by the edges produces the falsetto."

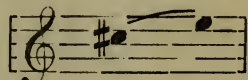
As to the characteristics of the three registers, it will be found that the chest voice, which is the lowest, is generally strong, ringing, and energetic, the medium weaker and more veiled in quality, and the head notes more penetrating than the other two. The use of registers by male voices I shall deal with later, and during the next few pages shall speak only of female voices.

FEMALE VOICES

As to the range of the registers, the chest voice may with contraltos commence as low as the E_b below *middle C*, and *theoretically*

extends upwards to  where the

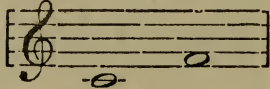
head register starts. The medium (or falsetto) register commences at the *middle C*, and extends

up to the same point as the chest 

Its upper limit varies with different voices, but will be found to lie within the limits of that interval. As soon as the medium ceases,

the head register begins and makes itself apparent by the fuller and more penetrating quality, which comes into the voice at once. The head register extends upwards from this point to a limit, which in exceptionally high light sopranos will reach the *E* or *F* above the high *C* of the dramatic soprano.

It will be observed that through an octave of the voice (from the *middle C* to the *C* above, roughly) the chest and medium registers coincide, and it would appear as though we had the choice of taking each note of this octave in either the chest or the medium. But though, theoretically, this is the case, in practice the choice between the two registers only extends

to the interval  If the chest

register is carried higher than the *F*, there will sooner or later be evil results. If the chest be forced to go up to *G* or *G* \sharp , for instance, the medium register begins to disappear, and after a few months it will be found that a "hole" has come into the voice: that is to say, the singer will be unable to take medium notes below

 or so.

When such a thing happens, there is only one possible cure. The use of the chest voice must be abandoned altogether for a few weeks, during which period the singer must start on the *upper C*, and take sustained notes downwards in the medium. After a week she will probably be able to sing down to the *G*, and can then take two-note and three-note exercises. This practice must be persisted in until gradually all the medium notes are regained down to the *middle C*, feeble at first but gradually growing stronger. Only when they have attained reasonable power must the chest register be used again, and after that it must be vigorously borne in mind that the chest must on no account be carried above *F*; indeed it would be well, except on very rare occasions, to abandon it after the *E*.

At this point it may be well to recall to the student's mind that one of the principal aims in the training of a voice is to make it equal in quality from the top to the bottom. Except in the case of light sopranos, all female voices will be faced with the difficulty that they have to deal with the three registers, and these may be of widely different qualities. Their aim will therefore be to join these registers neatly,

so that as far as possible they may conceal the passing from the chest to the medium and from the medium to the head, and make the three qualities approximately equal.

How is this blending of registers to be effected?

(a) *The blending of the medium and head registers* comes quite easily in a fairly robust voice, but in a weak voice the union is sometimes rather troublesome, the first two or three notes of the head being inclined to crack. This tendency may, however, be counteracted by sustaining the breath very steadily and singing as *legato* as possible. Where there is any such trouble, it will be well to practise exercises consisting of five notes ascending and descending, commencing on *A* or *B_b*. These will cover the point of junction of the two registers, and will soon cause all difficulty to be smoothed away.

(b) *The blending of the chest and medium registers* ordinarily requires more

attention, but it should not cause much difficulty if certain things are understood and carried out. In any register we find it necessary to sustain more (that is to say, to increase the pressure of breath) as we sing ascending notes, and sustain less (decrease the pressure) as we sing descending notes. Further, the chest register being much more vigorous than the medium, it will be found that to sing any particular note, say the *middle C*, in the medium calls for far less effort and pressure of breath than to sing the same note in the chest.

From this follows a rule which will be found useful to the singer. In an ascending passage of notes, when passing from the chest into the medium, *reduce* the pressure of breath ; and in a descending passage, when passing from the medium into the chest, *increase* the pressure of the breath. That is to say, when we wish to pass from one register into another, we must reverse the process by which we remain in the same register. It is in many cases found of

assistance to maintain the larynx in a fixed position, while the actual change is taking place, as there is often a tendency to jerk the larynx and to make a break while passing from one register to another. Sometimes it is helpful to round the vowel when passing up from the chest into the medium, and to open the vowel when passing down from the medium into the chest : that is to say, by making the chest notes a little rounder, so that they may approximate to the natural roundness of medium notes, and making the medium more open in order to approximate to the natural open quality of chest notes.

For the neat joining of the chest and medium registers various exercises may be used, which should lie entirely within the fifth, *middle C* up to *G*. These exercises may consist of portamento exercises, and of taking two notes either a tone or a semitone in interval, the lower in the chest, the higher in the medium, and passing repeatedly from the one to the other. Later the pupil may attempt what is considerably harder, to pass repeatedly from the chest to the medium and back again on the same note. As a final study in this she

may now practise swelled and diminished notes from *C* to *F*, commencing *pp* in the medium, swelling to *ff* in the chest, and diminishing once more into the medium.

Garcia in his earlier book has spoken thus of the passing from one register to another :—

“ Great difficulty is evinced in *drawing the tones in two registers at once*. The pupil must commence the note *piano* in falsetto, and in the sombre quality. This process fixes the larynx and contracts the pharynx. Afterwards, without varying the position, and consequently the quality, she must pass to the register of the chest, by fixing the larynx more and more, in order to prevent it from the abrupt motion which produces the hiccough at the moment of the separation of the two registers. Once entered upon the register of the chest, she must raise the larynx and dilate the pharynx in order to clear the quality, so that towards the middle of the duration of the note it has acquired its whole brilliancy and power. In order to extinguish the sound, the pupil must practise the reverse : that is to say, that, before passing to the register of the falsetto, *when the voice is diminished, she must deaden the sound from the chest*, still fixing the larynx below and contracting the pharynx, in order to support it and avoid the jerk on the change of the register. She must then proceed slowly from

the register of the chest to the falsetto, after which the pharynx should be rendered supple and the sound ended. I deduce this rule from the physiological fact that the larynx being lowered by the sombre quality, can produce the two registers without displacing itself. Besides, the displacing brings on the hiccough, which so disagreeably separates one from the other."

In order to make the three registers approximate to each other so that the pupil may be able to sing from one extreme to another without apparent change of quality, it will be found best to follow this rule. Let the chest notes be sung with an open quality, the medium notes be rounded somewhat in quality, and the head register still more rounded. The actual extent to which the medium notes and the higher of the head notes need rounding will vary with each voice. With some voices, for instance, very little rounding will be necessary in the medium to make it resemble the chest in quality, with other voices a great deal of rounding will be necessary. Again, sometimes the head notes need practically no rounding to make them resemble the medium, and at others they need a considerable amount. As a matter

of personal experience, I have usually found, that where very little rounding is necessary in passing from chest to medium, considerable rounding is necessary from medium to head; and *vice versâ*. It must, however, be quite understood that these matters are not hard and fast rules. Indeed, voices are occasionally met with which need practically no change at all in vowel quality, while in rare cases it may appear that there is only one register throughout, since nature has made the passage from chest to medium and medium to head so easy as to be imperceptible. But the registers still exist, even in these cases.

“What the singer needs to do is to let the registers borrow from each other their natural advantages.” The chest voice having a certain natural richness and brilliancy, let the medium try to cultivate some of this. The medium, on the other hand, having flexibility and brightness, let the chest try to cultivate some of this, the object at which the singer aims being a blended tone over the whole compass of the voice, without any individual register standing at or predominating over the others. The registers must be so absolutely united that the hearer

should be unable to detect where one ends and the other begins. It should be unnecessary to point out the vulgarity and inartistic feeling of a contralto trying to make an effect with a startling change from a very rounded light medium to a heavy open chest note: but the fact that one does on occasion hear such exhibitions of bad taste shows that it is not quite unnecessary to call attention to it.

A few words must be said as to the cultivation and improving of the registers. First we will take the medium, as this register in its untrained state is usually weaker relatively than either of the others, and lying in the middle of the voice its notes obviously are more used in a song than the other two together.

In the medium register the lips of the glottis only come into contact at their extreme edges, and the main cause of weakness is that these do not meet completely but allow a continual wastage of breath, so that the notes are very veiled in quality. It is necessary to counteract this tendency and bring ring into the voice. How is this to be accomplished? The *I* (ee) has the greatest tendency to bring the vocal cords completely together; in other

words, it has more natural ring than any other vowel. It follows from this, that the first course to be pursued is to sing each note of the medium register in turn on *I*. After this has been practised for a few days, attention may be given to the other Italian primary vowels, *A*, *E*, and *O*, and the method to be adopted for improving the ring in these is to prefix the *I*, and sing in turn on the medium notes the vowels *I A*, *I E*, *I O*, endeavouring to carry the ring of the first vowel on into the subsequent one. If this course be pursued for a few weeks, the register will be found to have improved greatly in ringing quality. Another method of strengthening this register may be practised concurrently with these exercises. This is to take staccato notes on every semitone of the register, repeating each vowel in turn three or four times.

The chest register, as we have already seen, has a natural ringing quality, and there will in this case be no question of having to combat a veiled quality. All that will be necessary is the strengthening of the register, and for this we merely have to practise with good open vowels, since these have more sound

than the closed or rounded ones, and therefore favour the lower register.

If it be necessary to cultivate ring in the medium register, it is still more necessary to do so in the head register, though it will be found that there is more natural ring to start on than in the medium. The reason for wanting "ring" in the head notes is that a greater pressure is called for, the vibrations being far more rapid than in medium notes. How is this ring to be improved? Not by the practice of the vowel *I*, for, while this was most effective in dealing with the medium, it has a tendency to squeeze the throat and to thin the voice very much in the "head." The head notes are, in fact, practised almost entirely on *A* and *O*, which give breadth. Staccato notes will be found of assistance, but these should be practised in the form of arpeggios started from the medium, since the constant repetition of high notes is apt to tire and even to strain the voice. In combination with these may be taken a portamento exercise. Start on an easy ringing note in the medium register, say on *A* or *B \flat* , and carry up the voice in portamento to the head notes which are lacking in ring.

This should be done with vigour, the top note being sustained for a very short time at first, which may be gradually lengthened as the voice acquires increasing ring.

MALE VOICES

In the case of male voices, the three registers exist, but only as the remains of the boy's voice. As the medium register is the characteristic of women's voices, so is the chest of men's. In the case of male altos, the false falsetto is cultivated, but in no other cause should anything but chest notes be used, save occasionally in the case of a very high tenor whose top C or C# will be sometimes found to be in the head register. For a bass, a baritone, or a tenor the medium (falsetto) is an illegitimate way of getting an effect, and is scarcely less vulgar and inartistic than the deliberate contrasting of the chest and medium register in a contralto voice. Does this mean that a man must always use a heavy chest quality? Not at all, for he will find it possible with practice to thin off the chest voice and sing a light *mezza-voce*, which is charming in effect. This is not the

same as medium (falsetto), the use of which is effeminate, and never to be used.

It may, perhaps, be urged that it is difficult to tell whether one is singing with a light chest register or with falsetto, but there is a practically infallible way of doing so. If one is singing a thinned chest note, it will be found possible to swell out on it to a strong *ff* heavy chest voice without any change. If, on the other hand, it is a falsetto, any attempt to swell out to a strong *ff* will result either in a bleating, stifled tone of very bad quality, or else in a jerk of the larynx before passing into the actual chest. This *mezza-voce* will be found most effective for a bass between the *middle C* and *E_b*, for a baritone between *D* and *F[#]*, and tenor between *E_b* and *A*, and this *timbre* blends the power of the chest with the softness of medium.

Before closing the chapter, it may be well to advise tenors to be most careful to sing from *middle C* up to *F* as far as possible in *mezza-voce*, without attempting to give the notes in this interval in a heavy chest voice or with a *ff*. It is only in this way that a delicate part of the voice can be bridged over and ease in high notes be reached. To make a practice of

singing *ff* in this interval will destroy the high notes, and if persisted in may even lead to a general breakdown of the voice. Mezzo-sopranos and sopranos will have to use similar care in avoiding heavy notes or *ff* effects in this interval an octave higher, for the same reason that it is a bridge to their high notes.

The *E*, *F*, *F* \sharp in tenors and sopranos in particular, must never be used with much force. They are the difficult and weak notes of these voices which will need attention and careful strengthening. From *G* upwards a crescendo is comparatively easy to acquire if the voices be true tenor and soprano, and not forced-up baritones or mezzos. As a final hint on the equalisation of quality of a voice, the following will be found an invaluable rule. Never attempt to sing the bottom three notes of the voice *piano* or *pianissimo*, and always make them more open in quality than the notes immediately above them, while the top three notes of the voice must always be sung with vowels more rounded in quality than those immediately below. The observance of this rule will do much towards the equalisation of the voice, which is one of the singer's greatest aims.



THE PHARYNX



CHAPTER VIII

THE PHARYNX

WHAT is the Pharynx exactly? The answer has been well given by Lee, who thus describes it:—

“The pharynx extends from the top of the larynx up to the posterior portion of the nasal cavity, that is at the back of the nostrils (the pharynx is that part which can be seen by opening the mouth wide and looking into the throat). It is bounded behind by the spinal column and its coverings, and is ended in front by the base of the tongue below, and by the pendulous soft palate and uvula above. It opens directly into the mouth by the large space between the uvula and tongue; it communicates with the nose by openings above the soft palate and uvula; it admits air to the middle chambers of the ears through two small passages called ‘Eustachian tubes’—the openings of which are placed behind the tonsils; it gives admission of air to the lungs, and

emission of sound from the larynx; and by an opening at the back of the larynx, it establishes communication with the stomach.

“The bolus of the food once thrown to the back of the tongue is grasped by the pharynx. To prevent it going upwards into the back of the nose, the soft palate and uvula are provided, and the food striking against these presses them backwards and upwards, so as to close the passage to the nose, and so passes downwards. In its descent it has to pass over the opening to the larynx and windpipe, but cannot go in, for to reach the opening to the larynx the food must strike first the epiglottis (which stands erect at the root of the tongue), but the doing so shuts it down over the opening, and the food is thus forced on to the next channel—the gullet, which is its proper route. Persons sometimes, whilst in act of swallowing, attempt to speak. The doing so raises the epiglottis or lid: a particle of food gets in under it, to remove which nature instantly institutes a violent fit of coughing, and then it is usual to remark that the food went ‘the wrong way.’”

On coming to the third part of our vocal mechanism, we find ourselves concerned with four main points:—

- (1.) The formation of vowels.
- (2.) The emission of pure tone and correc-

tion of faults; in other words, the proper placing of the voice.

(3.) The rounding of notes.

(4.) The question of breadth of tone as opposed to intensity.

1. THE FORMATION OF VOWELS

Vowel-sounds for the singer are produced when the mouth and pharynx remain free from obstruction while a note is being sounded. When any obstruction is formed by means of two parts of the mouth being brought into contact (lips, teeth, tongue, palate, and pharynx) a consonant results. One may note in passing, that in the case of the three consonantal sounds, *L*, *M*, *N*, the vocal cords continue to vibrate regularly and produce sounds of a definite pitch, so that these are sometimes called semi-vowels.

In attempting to produce vowel-sounds, we find ourselves faced by three possible methods of doing so.

(a) To form them by alterations in the shape of the mouth.

(b) To form them by alterations in the shape of the throat.

(c) To form them by alterations in the shape of the tongue.

The first of these methods has two objections : the purity of tone is affected, and the constant changes of the mouth result in a series of kaleidoscopic distortions of the facial expression, which, to say the least, are not attractive. This species of mouthing used to be adopted by the typical mummers of provincial blood-and-thunder melodrama some years ago. The second of these methods has the objection that the tone becomes unequal and lacking in purity, sounding strained and tightened.

The third is the correct method, and the following is the proper way of forming the principal vowel-sounds :—In all cases the jaw must droop loosely, the muscles being relaxed.

Here and elsewhere throughout the book, when I mention *A*, *E*, *I*, *O*, *U*, I refer to the Italian vowel-sounds :—

<i>A</i>	being pronounced as the <i>a</i> in “part.”
<i>E</i>	„ „ „ <i>e</i> in “prey.”
<i>I</i>	„ „ „ <i>ee</i> in “feel.”
<i>O</i>	„ „ „ <i>o</i> in “show.”
<i>U</i>	„ „ „ <i>u</i> in “true.”

For *A*, let the tongue be flat and limp, the vocal arch expanded.

For the open *E*, expand the vocal arch and raise the tongue slightly in the middle.

For the closed *E*, the tongue should be still further raised, and its edges should touch the upper teeth at the sides.

For *I* (*ee*), the distance between the tongue and the palate should be still further reduced, while its edges are pressed between the upper and lower teeth at either side.

For the open *O*, the vocal arch is expanded, and the tongue hollowed at the back.

For the closed *O*, there is a very slight rounding of the mouth, and considerable expansion of the vocal arch.

For *U* (*oo*), the mouth is slightly rounded as in *O*, and the vocal arch is still further expanded, the soft palate being rather more raised.

It will be observed that in the proper formation of these vowels, the tongue does all that is required, excepting in the case of *A*, *O*, and *U*, where it receives assistance from the expanding of the vocal arch. It will be found a good plan to learn to think the vowels without moving the parts of the mouth which

produce them, since this mental preparation helps us when we come to the actual singing of them.

In order to acquire ease and certainty in the formation of vowels, it will be well to practise exercises on what may be called the primary vowels, the Italian *a*, *e*, *i*, *o*. At first it will be unnecessary to use the singing voice in doing so, as it is merely a question of obtaining the requisite mastery over the tongue.

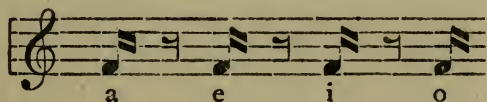
A being the simplest vowel may be taken as the starting point, only be certain that it is an *A* and not *ar*, which one so often hears. Having given this correctly, take the next one slowly, *E*, trying to feel the alteration of the tongue. Then repeat them uninterruptedly, alternating the two and gradually quickening them till they can be given with ease, thus: *a*, *e*, *a*, *e*, *a*, *e*. A common mistake with the English-speaking nations is to give, instead of a pure Italian *E*, a species of diphthong *ayee*, while, instead of a pure *o*, they give the diphthong *o-oo*; it will therefore be well to be on the look-out for these faults, as it is necessary to correct them at once before they have a chance of becoming habits.

Tendencies are comparatively easy to correct,

but habits are difficult to get rid of. It is precisely for this reason that it is always the best policy to have lessons from a good teacher from the very start. He will be able to correct evil tendencies and eradicate faults before they have a chance of becoming habits, and by proper tuition the pupil will be taught to acquire good habits instead of bad ones. And it should be borne in mind, that all habits once acquired are equally difficult to lose, whether they be good or the opposite.

Having conquered the *E*, the student will take *I* in precisely the same way, with *A* as the starting point: *a, i, a, i, a, i*, and then *O* similarly—*a, o, a, o, a, o*.

When the formation of these four primary vowels has been thus rendered with ease and precision, a good finishing exercise will be to give four staccato notes on the four successive vowels thus:



repeating these on each semitone of the octave *c''* to *c'*. After mastering these five vowels, there should be little, if any, difficulty in giving the proper formation to the other vowel-sounds

which may be met with in the English, or indeed in any other language, the principle of using the tongue being the same, with occasional modifications.

The following is a list of the vowel-sounds: the five Italian ones, *A*, *E*, *I*, *O*, *U*, being printed in capitals:—

<i>à</i> . . .	(mat, cat, etc.)
<i>A</i> . . .	(Italian— <i>Madre</i> .)
<i>aa</i> . . .	(bath, harm.)
<i>ae</i> (<i>ä</i>) . . .	(care, hair, pear.)
(French <i>è</i> , <i>é</i>)	(heather, met.)
<i>E</i> . . .	(stain, came.)
<i>e</i> (<i>eu</i>) . . .	1 <i>a</i> (sugar.)
	2 <i>e</i> (her.)
	3 <i>i</i> (stir.)
	4 <i>u</i> (hurt.)
	5 <i>y</i> (myrrh.)
<i>i</i> . . .	(hill, bid.)
<i>I</i> . . .	(heat, piece, steal, conceit.)
<i>o</i> . . .	(stop.)
<i>O</i> . . .	(own, moan.)
<i>ö</i> (<i>oe</i>) . . .	(German— <i>schön</i> .)
<i>ü</i> . . .	(German— <i>beschützt</i> .)
<i>ū</i> . . .	(German— <i>fühle</i> .)
<i>ù</i> . . .	(foot.)
<i>U</i> . . .	(fool.)
<i>u</i> . . .	(up, love.)

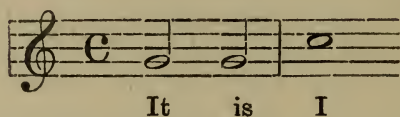
In addition to these there are the French nasal vowels, *an*, *en*, *in*, *on*, *un*.

Of the above list the *u* (as in “up”) is the one for the formation of which the tongue is in its passive position. For this reason we hear sometimes singers who allow breath and tone to come out after the completion of the consonant at the end of a word, where the next word begins with a consonant, the effect being extremely unpleasant, *e.g.* :—“*I do not love thee*” sounds something like this—“*I do notu lovu thee.*”

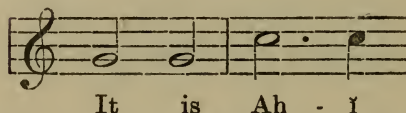
Before leaving the question of vowels, it will be well to call attention to the four diphthongs, which are compound vowel-sounds. These may be variously represented, so that the singer must be on the look-out for them.

- (1.) *The sound of “A” (as in “ah”) combined with “i” (as in “it”).* This may appear in such combinations as any of the following :—“eye, aisle, height, thy, might, guise, die, buy.” In all these and similar cases the singer must remember that the *A* sound is long, the *i* short. Hence, to sing the words “It is I” with a long note on the *I*, it will be necessary to sing

three-quarters of the note on *A*, and the *i* on the last quarter,—or, if anything, on even less than that.



Should be rendered thus:—

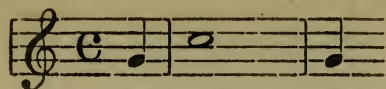


- (2.) *The sound of "A" ("aw" as in "all"), combined with "i" (as in "it") appearing in any of the combinations:—"voice, buoy or boy."*

In this, as in the first case, the final sound is short, the first one long: "voice" being pronounced on a sustained note, *vaw—iss*.

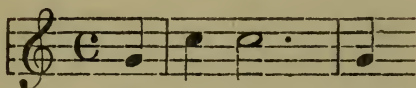
- (3.) *The sound of "i" (in "it"), with "u" (oo) as in rule, appearing in any of the following combinations:—"feud, beauty, new, view, youth, cue, cube."*

In this case the *i* sound is again short, so that in a sustained note the first vowel-sound will be quickly left and the second dwelt on: *e.g.*—



Her beau - ty

Should be rendered thus:—



Her bty - oo - ty

- (4.) *The sound of “A” (as in “ah”), with “u” (oo) (as in “rule”).* As in the combinations “now, thou, bough.” In this the first sound *A* is long, the second one *oo*, short, though not quite so short, compared to the length of the *A*, as is the *i* in the three combinations referred to.

THE PHARYNX—(*Continued*)

CHAPTER IX

THE PHARYNX—(*Continued*)

2. PURE EMISSION

FOR the obtaining of this, one of the most important things to learn is to open the mouth to the proper extent, and to relax the muscles. By “relax” is meant “not to tighten”: it is not intended that the muscles should become flabby.

The old Italian teachers used to say that when the proper quality of tone was being emitted the mouth was opened sufficiently wide for the index finger to be passed between the teeth. By this they simply meant that the two sets of muscles working the jaws should be relaxed, and the lower jaw allowed to drop of its own weight. It can be easily verified that this results in the best tone, for, if we gradually close the jaws, we hear the voice take on an increasingly muffled “teethy” quality; while if,

on the other hand, we gradually push the lower jaw downward from the relaxed position, we hear the voice becoming increasingly harsh and cavernous. In the case of those who have a habit of singing with the mouth nearly closed and the teeth clenched, should admonition fail to rectify matters, and the attempt to open the mouth too wide (going to the other extreme) prove useless, the following will be found a certain cure. Take a cork from an ordinary wine bottle and place the broader end between the teeth, continuing to hold it there, while singing notes on the different vowels. After a few practices with this, it would be found unnecessary to continue, as the habit should have disappeared.

In singing, the mouth should, of course, always be properly opened *before* commencing to sing a note, as otherwise an uncertain sound will be heard, for as the mouth begins to open it will be found that the quality of tone will gradually undergo an alteration.

Faults of Emission

Purity of tone depends on the proper opening of the mouth and on the proper management

of the tongue, lips, jaw, throat, palate, etc., each of which is otherwise liable to lead to bad emission. The principal faults are the following :—

(1.) *Nasal tone*.—This results from the undue dropping of the soft palate, and can therefore be counteracted by keeping the palate raised higher. . . . We obtain the sensation of the action of the soft palate by first yawning and then swallowing. In the first case, the palate is raised as high as it will go ; in the second, it is brought down as low as it will go.

The usual test of nasal singing is to pinch the nose suddenly while emitting a note, completely closing up both nostrils. If the tone has been too nasal, this quality will be much intensified. If, on the other hand, the tone has been properly emitted, the nasal cavities being used only as much as they should be, the tone will remain unaltered when the nostrils are closed. So, then, where this test shows that there is too much nasal tone, all we have to do is to raise the soft palate higher, and the defect will at once disappear.

Some students may at first find it difficult to control the palate sufficiently for them to

be able to stop the nasal quality. It would almost appear as though nature had foreseen such a possibility, seeing that she has given us a method of raising the palate by thinking of something quite different. If we place our fingers lightly over the larynx and then yawn, we shall feel it descend; if we follow this by swallowing, we shall feel it rise. These are outward manifestations of a physiological fact, that the larynx and soft palate are muscularly connected in such a way that they can only move in opposite directions. As the larynx rises, the palate must fall; as the larynx falls, the palate must rise; while when our body is at rest the larynx lies midway between the two extremes of movement, and the soft palate does precisely the same. So here we have our simple remedy. If we wish to stop the nasal quality, and find difficulty in managing the palate, we merely have to think of lowering the larynx; for as it descends the palate rises and the nasal tone ceases.

Nasality may not, however, always be due to the undue dropping of the soft palate. It is sometimes, though rarely, brought about by an imperfect palate or by growths in the nasal

passage, in which event the cure lies outside the teacher's province.

(2.) *Closing up the nostrils*.—This is sometimes confused with the previous fault, though, as a matter of fact, it comes from a cause diametrically opposite. How often has one heard the remark that one can generally tell an American, because he speaks through the nose. It is perfectly incorrect: it is because the American does *not* speak through the nose. Some property of the ear, or else the way of living, renders Americans liable to nasal catarrh, which totally or partially closes up the passage at the back of the nose communication between the nostrils and the pharynx. Hence the twang which we are wont to term “nasal.” So the singer sometimes acquires the trick of pinching up this passage, and preventing any sound whatever coming through the nose, with the result that the voice acquires a most unpleasant twangy quality. The description of the fault gives the remedy.

(3.) *Guttural qualities*.—Another unpleasant fault of emission is the throaty quality which arises from a partial closing of the passage between the larynx to the mouth. It is caused

usually by allowing the root of the tongue to weigh on the epiglottis, which is thus pushed out into the waves of tone, giving them a closed-in, throaty sound.

There are several ways of curing this defect, such as (a) closing the lips and humming; (b) keeping the tongue absolutely limp as it is when the mouth is closed, and practising on *eu* for a little, then taking the vowels from this, in the same way as we used the *I* (*ee*) to bring ring into the other vowels; (c) by singing for a few days on the vowels, abandoning the open *A*, *I*, and using *U*, *E*, and *O*, for a time altogether. Either of these methods will prove effective, and may be chosen by the teacher according to their suitability for any individual pupil.

(4.) Another defect is that of going to the other extreme—*bringing the tongue too forward in the mouth*; or, again, *of raising it too much during singing*, so that it fills the mouth and smothers the tone.

The former is quite easy to correct, but in the case of the latter, where a pupil experiences difficulty in overcoming the fault, it may be necessary to hold the tongue down by means of

the handle of a spoon. The method of correction is unpleasant but effective.

These are the four principal faults of emission, and indeed the only ones that present any real difficulty, and one need only refer briefly to a few others.

(5.) *Squeezing the throat*, and so strangling the tone, instead of leaving it expanded. This may be corrected by taking free deep breaths (which expand the throat), and then trying to sing without altering the throat in any way.

(6.) *Shooting out the lips*: a fault which will quickly disappear if the student for a short time will make a practice of singing before a glass.

(7.) *Protruding the lower jaw*.—This is adopted by some singers with the effect that their voice is considerably increased in size and power: it has indeed been considerably advocated by some teachers. Its merits or demerits may be tested upon the touchstone of “beauty of tone.” Should a singer aim at beauty of tone? If the reply be in the negative, then the protruding jaw with its consequent increase of tone may at once be adopted. But “beauty” of tone is the very foundation of the Italian

method. If we remove it, all the ideals of the Art of Singing topple to the ground.

Worship of mere "beauty" at the expense of nature may conceivably be carried to extremes, and the true portrayal of such feelings as bitter hatred or fury may well demand a touch of hardness in the quality of the voice, but short of such cases as these, beauty of tone should always be one of the great aims of the singer. Accept "quality before quantity" as an axiom of the vocal art, and we find that the protruding jaw is inadmissible since its attendant increase of tone is only to be obtained at the expense of quality. In the vocal art, as in every other art, quality is always a primary consideration, and quantity must be made entirely subservient to it.

(8.) *Raising the head*, and so tightening certain muscles of the throat: a proceeding which has immediate ill effects on the tone. As to the proper method of standing, when about to sing, "The body must be straight, well planted on the feet, and without any other support; the shoulders well back, the head erect, the expression of the face calm." Any trick of tilting the head too high can usually be

corrected by merely calling attention to it each time it occurs.

If, after reasonable admonitions, the fault still continues, it may be well for the teacher to take a narrow strip of newspaper as being most handy, put it round the pupil's neck, with the middle of the piece lying lightly over the chin and the ends being fastened at the back by a pin, whose point protrudes inwards towards the neck. By this means when the chin and head are kept in proper position all is well, but each attempt at raising the head results in a gentle reminder from the pin.

(9.) *Lowering the head.*—Another fault which is to be avoided is that of holding the head downwards.

While on the subject of such habits as these, one may refer to a few minor ones:—*Elevating the eyebrows, frowning, lifting the upper lip, rising on tip-toe, clenching the fingers of the hand*, etc. These faults principally occur when attempting to sing high notes. In curing them, however, no difficulty presents itself. For the first three, the use of a mirror may be recommended; for the remainder, merely a little strength of mind.

The Placing of the Voice

If the hints be followed and the faults avoided which have been given on the preceding pages, the pure emission of the tone which will result should in itself bring a correct "placing" of the voice. All that remains is to follow the old Italian advice, "Bisogna cantare sul fior delle labra": form the tone, as it were, on the very edge of the lips. By this it is meant that, when the voice is properly placed, there will be a sensation of the tone vibrating in the front of the mouth above the middle teeth.

It will be found that by the air striking the hard palate above the front teeth, with the tongue lying motionless, a very rich volume of tone will result, and the cavity of the mouth, acting as a sounding-board, will enlarge with the wave of sound. In order, therefore, to have the voice properly placed, we must try mentally to get a sensation of directing the tone to the front of the mouth and of singing on the breath. An aid to this may be found in humming sustained notes, by which means the

vibrations in the front of the mouth will make themselves very noticeable. After doing this, open the mouth and repeat the same notes, trying to keep everything the same so as to obtain similar sensations. It should not be long before this results in the proper placing of the voice, after which it will be well to abandon all further humming, as this practice is not considered a good one for singers.

3. THE ROUNDING OF NOTES

As already explained, the various vowels are formed by the tongue taking certain positions in the mouth. In speaking of the rounding of notes, we will for the moment confine ourselves to the "first" primary vowel, *A*, which is formed by the tongue being kept flat and limp. Now it will be found that the *A* is capable of certain varying shades of quality or *timbre*, which principally depend on the height of the soft palate. When the palate is lowered, the vowel attains a clear, open quality, and when it is raised, as in yawning, the vowel takes on a dark, closed *timbre*, resembling *aw*. It is possible as an exercise to start a note on a very open quality of *A*, and then gradually

to raise the palate till it reaches its top limit. During the process, the vowel will gradually take on a darker, more closed quality, till finally it reaches *aw* or *o*.

The process of raising the soft palate we term "rounding" the vowel, and that of lowering the palate we term "opening" it.

If we take the other vowels, we shall find that they are capable of similar changes. Thus, if we take *E* with a clear *timbre* and then gradually raise the palate, the vowel will be rounded more and more till it approximates to the French *eu* (as in "her"); *I*, similarly treated, approximates to the French *ü* (German = *ü*); while *O* approximates to *oo*, as in "who."

The darker, closed *timbres* of vowels display much richer quality of tone, and for this reason there are singers (usually with low-pitched voices) who adopt it entirely, singing invariably in "closed" *timbre*. Others, again (usually with high voices), sometimes pin their faith entirely to "open" *timbre*, and never sing except with "clear" notes. I have indeed heard two singers, champions of such opposite methods, discuss the matter thus:—

“What style of singing do you go in for?”

“I always sing with closed production.”

“Oh, do you? You ought to go in for the pure Italian method of singing with open production.”

Of course nothing could be more ridiculous than such remarks, which merely display the speaker's ignorance on the subject of “open” and “closed” *timbres*. As singers we do not adopt very “open,” or very “closed,” or a middle course of fairly rounded notes, but we make use of all the possible shades of quality lying between the two extremes, according to the expression of the various phrases.

The reason for this is, that every feeling which we experience has for its expression a certain definite quality of voice, and this quality, if we analyse it, consists of a certain definite degree of “open” or “closed” quality, combined with a certain definite degree of “ringing” or of “veiled” quality. The former effect, as we have seen, is brought about by the degree of raising of the soft palate, the latter by the action of the vocal cords, and the degree of their perfect or imperfect closing between the vibrations. Hence, in one phrase the singer

may be using an "open ringing quality," and in the next a "closed veiled quality." It all depends entirely on the feeling to which we wish to give expression.

Let it not be thought that these various qualities are entirely confined to the singing voice. On the contrary, they are equally a part of the speaking voice. If we are very happy, our speaking voice involuntarily takes on an "open" ringing quality ; when we are miserable, it takes on a very "closed" veiled quality. We do not think of the mechanism by which we transmit the feeling into the voice, but we do it naturally. So equally all the other feelings have a definite quality of voice by which they are expressed : love, anger, fear, hope, etc.

For the ordinary practice of exercises in technique (scales, etc.) the student will choose a middle quality of vowel, inclining to the "open," rather than to the "closed," but he will find it advisable occasionally to practise with other degrees of open and closed qualities, and to use the already suggested exercise of passing from one extreme of a vowel to the other on the same note, *A* to *o*, *E* to *eu*, etc. ; only by this can proper preparation be made for the

expressive rendering of songs which is the final aim of the singer.

4. BREADTH OF TONE

This subject has been already referred to in dealing with Intensity of Tone, and only a few words need be added. It will be found that the expansion of the pharynx and of the vestibule of the larynx will give increasing volume to the sound. The more open and expanded we keep our throat, the more breadth will be given to the tone. This is what is meant by the often-heard advice, "sing with an open throat." It means that we should in the ordinary way keep the pharynx well expanded, as it is when we yawn or take a deep breath. The reason is that the tone after passing through the larynx will become developed to its fullest extent. A singer will obviously aim at making the most of his natural advantages, for a full, broad, rich voice of good quality will always bring greater satisfaction to the hearer than a thin, reedy voice.

It is well to obtain mastery over the expansion and contraction of the pharynx and vestibule of the larynx, for, while in the ordinary way when we use great "intensity" we join this

with great breadth of tone, so as to obtain the best result in *forte* singing, nevertheless occasions may, and will, occur when we shall need to give due expression to a phrase, by singing with great intensity of tone and yet with a very little breadth or loudness. For instance, we shall make use of this effect when the phrase which we interpret demands the expression of intense fear, combined with a *pianissimo* musical effect. Without due knowledge of the mechanical means for obtaining this effect, the interpretation would prove sadly lacking in truth.

THE ORGANS OF ARTICULATION

CHAPTER X

THE ORGANS OF ARTICULATION

THE Organs of Articulation consist of the tongue, teeth, lips, hard and soft palate, etc., and all actions of these organs (whereby any two of them come into contact, causing a total or partial obstruction) are called consonants.

As singers we are concerned with all such articulatory sounds, but in so doing we must recollect that we are dealing with consonantal sounds only. We must keep out of our mind any idea of the actual letters of the alphabet, *Bee*, *Cee*, *Dee*, *Eff*, etc., for the following reasons:—

Firstly, some of the letters of the alphabet are differently pronounced under various circumstances, as for instance, *C* in the words “cat” and “cinder.” Secondly, there are certain consonantal sounds which do not occur in the

alphabet at all, *sh* in such words as “shutter,” *ch* in “child,” and so on. Thirdly, certain letters of the alphabet may have the same consonantal sound, *e.g.*, *K* and *G*. Fourthly, *X* will be found to consist of two consonantal sounds used in conjunction. Lastly, for the singer’s purpose the letter *H* is not to be reckoned as a consonant at all, since it is not formed by any contact of the articulatory organs.

CLASSIFICATION OF CONSONANTS

The consonantal sounds may be roughly classed in three divisions:—

- (a) Those in which the obstruction is Complete.
- (b) Those in which it is Partial.
- (c) Those in which a preliminary sound is heard previously to the explosion; this preliminary sound being caused by the filling of the cavity, behind the complete obstruction, with slightly compressed air.

These three divisions are termed respectively *Explosives*, *Permanents*, and *Semi-explosives*.

Before dealing with Articulation under these heads, I must call attention to several matters connected with it.

In the first place, we are dealing with actual consonantal sounds, not with the consonants as pronounced in saying the alphabet, for in the latter case a vowel-sound is joined for the sake of pronunciation of the consonant. When I write *D*, I do not mean *Dee*, but the simple sound caused by the tip of the tongue striking against the teeth, without the vowel-sound *ee* being attached.

In the second place, the triple classification of consonants, Explosives, Permanents, Semi-explosives, is one specially formed for the use of singers, as will be seen later. It must be taken as being quite independent of the usual division into Labials, Dentals, etc., which refer to the actual organs of the mouth brought into play in the formation of the different consonants.

In the third place, I do not consider it necessary to define the exact combination of articulatory organs by which the consonantal sounds are formed. I shall merely call attention to some special points which should be noted by the singer.

(1.) *Explosives*.—*P**T**CH* (in “chin”)*K=C* (in “cat”) = *CH* (in “character”) =*Q* (in “queen”)*F**V*

Be careful to distinguish between these two last, for there is a tendency to make the *V* resemble the *F*. For the *V* the teeth must be pressed firmly against the edge of the lower lip, where the red leaves off and the white begins. For the *F* the teeth must touch the middle of the lower lip, and do not require to be pressed as firmly as in the case of the *V*. For the *V* the lower lip must be raised, and for the *F* the same must be done in a less degree. In all these, as William Nicholl has pointed out, where the current of unvoiced breath is altogether stopped by organic contact, the only audibility that the letter so formed can have is the puff or explosion, which follows the separation of the organs. This must, however, be clearly heard, or the letter will be partially lost.

In the mode of producing this effect lies one of the most important principles of speech. If only the breath in the mouth, and not any from the lungs, be ejected, a distinct, sharp, quick percussion will be heard, which gives to these breath articulations all the audibility of which they are susceptible.

(2.) *Permanents*.—

{	<i>L</i>	These are the only three consonants in which musical pitch can be combined. All the others are mere sounds without possibility of pitch being given during their articulation.
	<i>M</i>	
	<i>N</i>	

Z (in “topaz”)

Zh (in “azure”)

S (in “see”)

SH = *S* (in “sure”)

{	<i>TH</i>	(1) (in “think”)
		(2) (in “thy”)

Great care must be taken to differentiate between these two sounds in singing, as they are quite distinct, and must not be confused with each other.

W

Y

R This may be given either with a single touch of the tongue against the hard palate, or with a rolling of the tongue against the roof of the mouth.

The former may be used under any circumstances, but the rolling of the *R* is only allowable

- (1) At the beginning of a word ;
- (2) When united with another consonant either at the beginning or in the middle of a word.

R must never be rolled at the end of a word.

(3.) *Semi-explosives*.—

B

D

In both these cases be careful to give the due preparatory sound, otherwise they will resemble *P* and *T* respectively. Do not let the vocal cords open after the articulation, for it would result in further breath coming out.

G (Sounded hard as in “go.”)

G (Sounded soft as in “gently”)=*J* (in “joy.”)

When pronouncing these, do not allow the compressed air in the mouth to blow out the cheeks or the lips. When the consonants are properly articulated (none of the breath from the lungs being used in producing them, but only that in the mouth), there will be an explosive sound somewhat resembling the noise made in drawing a cork. When breath from the lungs is used, however, during their formation, this sound will be absent, and the consonants in consequence will be wrongly formed.

In addition to these Explosives, Permanents, and Semi-explosives, there are six further consonantal sounds.

X (1)=*KS* (in “excellent”).

(2)=*GS* (in “exactly”).

KS and *GS* being the phonetic equivalents for *X*, that consonant will be treated in pronunciation as two sounds, an Explosive followed by a Permanent.

CH As pronounced in the Scotch “loch” and the German “ich” (the latter

differing slightly from the former, being sounded higher up in the throat).

WH Pronounced *HW*.

GL

GN

These two combinations occur in Italian, and are pronounced *LY*, *NY* respectively. They will in singing be treated as two consecutive Permanents.

Finally, there is the aspirate sound, *H*, which is formed by an uninterrupted flow of breath. This does not come under the category of either consonant or vowel sounds, but stands by itself.

FURTHER HINTS ON ARTICULATION

Where the combination *ST* occurs at the end of a word, there is a great tendency to drop out the *T* altogether, especially where the next word begins with an *S*. For instance, *must stand* will be often pronounced *muss stand*. Be most careful, therefore, to sound the final *T*, as indeed all final consonants.

For the two consonants, *hard G* and *K*, the

soft palate and the back of the tongue are brought together to form the obstruction, and distinct articulation of these cannot be given unless care is taken to make the position airtight. In this connection one may mention a law which exists. "The greater activity there is in the cavity of articulation, the less there will be in the larynx." That is to say, in the case of the Explosive *P* there is great activity in the mouth and none in the larynx, whereas in the Permanent *L*, where the vocal cords are vibrating throughout the sound (*L* being capable of definite musical pitch), there is but little activity in the mouth, the tongue being pressed gently against the palate and the rest of the cavity being at rest.

It must be borne in mind that in singing words or sentences the vowels and the consonants are separate and independent. They follow one another closely, and the singer endeavours to pass from one to the other with smoothness and without interruption, but the consonants have not any musical pitch (with the exceptions of *L*, *M*, *N*), and, while they are being articulated, musical sound and pitch must for the moment cease, only to be taken up again

when the consonant or series of consonants have been formed, and a fresh vowel is being entered on. Sometimes there may be as many as five consonants in sequence, so that there is on such occasions a comparatively considerable interval before musical sound is resumed. As an instance of this one might take the line—

“Dancing their *most sprightly* measures.”

Our singing voice, then, is not heard in the articulation of consonants, but only in the emission of vowels. At the beginning of a word the consonant must be clearly sounded before the voice is heard; in the middle of a word the consonant will temporarily interrupt the voice; at the end of a word the consonant will be sounded after the voice has ceased.

It often happens that a vocalist will bring strain and effort into his singing and find his voice lacking in beauty merely from ignorance of these facts. He tries to sing the consonants, instead of stopping the voice altogether while the tongue, teeth, etc., are articulating the non-musical consonant sounds.

THE JOINING OF TWO WORDS

In coming to the question of the joining of words together during the formation of sentences, we learn the use of the classification of consonants into Explosives, Permanents, and Semi-explosives.

(A) *Where the second word begins with the same consonant as that which concludes the first word.*

There must be no break between the two words.

(1.) *Where the consonant is an Explosive*, there must be only one explosion, but it must be made relatively double as strong, while a slight pause is made before it.

For instance, if we had to sing the words, "stop pulling," we should render it "sto-P-ulling," giving a single explosion of the *P*, as we would pronounce the double *P* in "opportunity."

(2.) *Where the consonant is a Permanent*, we must not break off the consonant at the end of the word and resume it again at the beginning

of the next, but, Permanents being capable of prolongation to any extent, we make the sound of the double consonant twice as long as that of the single consonant.

For instance, if we have to sing "I love him more," we do not part the lips after the first *M* and press them together again for the second, but we keep the lips pressed together for double the length of time:—"I love hi-M-ore."

(3.) *Where the consonant is Semi-explosive,* we go on precisely the same principle. With the words "stab brutally," for instance, the *B* has two portions, the preliminary pause during the compression of air in the mouth cavity, and the soft explosion, when the lips are parted. What we do then is to make the preliminary pause twice as long, and the explosion twice as strong:—"Sta-B-rutally."

(B) *Where the second word begins with a consonant different from that which concludes the first word.*

There must still be no break between the two words, but the articulation is simple, once the mechanism of consonantal sounds has been

properly mastered. There is a tendency for the final consonant to be weakened or lost altogether where the next word begins with another consonant, and it will be well to be on the look-out for this fault.

Attention may be called to the case in which one word ends with *D* and the next begins with the related consonant *T*, *e.g.*, "and take," the treatment of this being somewhat difficult. There should be only one explosion instead of the two, which one would expect. First give the preliminary sound of the semi-explosive, but instead of following this by the soft explosion of the *D*, substitute the sharper explosion of the *T*.

The same process applies to the related consonants, *B*, *P* (*e.g.*, "The stab pierced him") and *G*, *K* (*e.g.*, "They found the stag killed"). This rule does not, however, apply to the semi-explosive *J* and its related *CH* (*e.g.*, "His age checked him"), which should be pronounced with two explosions.

(C) *Where the first ends with a consonant and the second begins with a vowel, or vice versâ.*

In this case no difficulty presents itself.

ARTICULATION IN SONGS

In rendering songs we must aim at having a steady, continuous flow of sound without any jerkiness. In order to attain this end, it will be well, during the earlier stages of singing songs, to take each one as a "vocalise," discarding the words for the time being and singing the melody to the vowel *A*, in order to overcome any difficulties of execution and to pass smoothly over any awkward intervals.

After doing this, turn the attention to the words of the song, and intone them on any note which lies comfortably in the middle of the voice, remembering always the object to be aimed at,—the steady, continuous flow of sound, consonant and vowel succeeding each other without any jerkiness. In order to attain this result it is necessary to keep the larynx firm and the flow of breath uninterrupted from note to note, from syllable to syllable, as if the sounds were a single and continuous note.

As soon as students start on songs, they will quickly perceive that there is one great difference between singing and speaking. In

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singing the vowels are of necessity dwelt on at much greater length than in speaking. This being so, it follows that the consonants will have to be articulated more strongly in singing than in speaking, otherwise the words will not be distinct. It will be further found that in the rendering of a *fortissimo* passage the consonants must be more strongly articulated than in that of a *mezzo-forte* or *piano* passage, otherwise the consonants will be drowned by the increased sound, and the words be completely lost.

It would be impossible to lay too great a stress on the importance of distinct articulation. A singer must not be content to have his words sufficiently distinct for the audiences to hear them by straining their attention. He should aim at such clearness that the audience can hear every word, every syllable, without having to make the slightest effort.

Mere distinctness of articulation is, however, not sufficient. Purity in pronunciation is scarcely less necessary, and this can only be achieved by giving each word its proper accent, each vowel its precise sound.

As to the standard of pronunciation to be

adopted, he should aim at giving that which would be used by any person of general culture, avoiding all provincialisms and such tricks of speech as the clippin' of the final *G*. To attempt to go further than this is to lay oneself open to the charge of affectation. To pronounce the *E* in such words as "children," "angels," as one would pronounce the *E* in "men," or "devil," as if the *I* were similar in sound to that in "fill," comes under this category.

Let the pronunciation be clear, clean-cut, and cultured, but never let it become affected.

THE ART OF EXPRESSION

CHAPTER XI

THE ART OF EXPRESSION

ALL art is creation, idealisation, self-expression in a certain medium. The artist, as it were, absorbs certain impressions, passes them through his own mind and reproduces them in a fresh medium stamped with his own personality. When the landscape painter, for instance, gazes on a scene, his eyes note the form and colour, and his temperament adds something further of himself. He produces in the medium of paint a landscape showing us not merely those particular material things which we should at once recognise on visiting the spot, but also the personality of the artist, and in a certain degree his temperament at the time of painting it. The photographer imitates, the painter idealises.

It is the same with the writer, the actor, the sculptor. So, also, the singer absorbs certain

material, the lines of the poet and the music of the composer. These he bathes in his own personality and translates the whole into another medium, his voice, the result being what is styled his interpretation of the song.

In all these cases, before the artist can accomplish his desire, he must be a perfect master of the technique of his art, and of the medium in which he works. Thus the singer, before he can become great in interpretation must be absolute master of his instrument. He must acquire firmness, power, flexibility, faultless intonation, extended compass, and pure emission. All these things, however, are but the preliminary studies of the singer, the necessary preparation for the proper interpretation of songs, which will require knowledge of the Art of Phrasing, insight into the different Styles, and development of the power of Expression. Of this wide field of study I am only here able to give a rough outline, but I hope to deal more fully with the Interpretative side of the singer's art upon some future occasion.

The singer must have a voice, and he must have it trained in all those things which contribute to the attainment of perfect breath-

control, the proper placing of the voice, the full development of its natural resources, and the acquirement of technique. But these are only preliminary to those finishing studies of the singer which are all important, and yet, alas! too often neglected—Phrasing, Style, Expression.

When one hears a vocalist with a fine voice trained to perfection but devoid of any expression, one can only lament the pity of it. The singing may be artistic, but it is cold and lifeless, and cannot appeal to us.

A vocalist, to attain real and lasting success, *must* master this stage of the art of singing. Without expression he cannot hope to hold the interest of the listener, for he is appealing neither to the intellect nor to the heart, but to the ear alone. Hence monotony will be the inevitable result.

How is the singer to avoid monotony? He needs no miracle, as did Pygmalion, for the answer to his question may be found in some degree by following a piece of advice which Sir Joseph Barnby once gave :—

“Listen critically to vocalists whenever you can. You will find that there is no one from whom you cannot learn something. If the

artist be good, analyse his success—find out what are his good points, and follow them. If he be bad, find out what are his bad qualities, and avoid them.”

Take, then, the dull singer: lay him on the operating table, and dissect him carefully. What are the causes which are mostly responsible for producing apathy, almost antipathy, in the listener? Faults of “emission” and “execution” which have to do purely with the technical side of the art we will ignore, confining ourselves to those which deal, firstly, with the rendering of the music, secondly, with that of the words.

Of the first, perhaps the most common fault is that of the voice remaining *forte* throughout the composition. Another trial is the song in which uniform *tempo* is sustained from the first to the last note. Again, as regards the manner of rendering the music, a graceful *legato* is undoubtedly a consummation devoutly to be wished, being the foundation of all good singing, but, if adhered to without deviation from beginning to end, it is apt to become wearisome.

Of the second (the rendering of the words),

perhaps the most trying of all faults is that of singing line after line without the accentuation of any syllables. The reason is this. In all human speech the emphasising of the most important words, and in a less degree those of secondary importance, is a universal characteristic. Without it speaking would lose half its significance, and singing without any accents sounds equally unnatural.

Scarcely less trying is it to hear verse after verse, sometimes song after song, rendered with exactly the same *timbre* or tone-colour. It is conducive to the most extreme monotony, and certainly conveys to the unhappy listener the idea that the vocalist is incapable of the smallest particle of feeling or expression.

Now, upon examining the above faults, one or more of which will be found in every dull singer, it does not take long to discover that one factor is present in all — "Sameness." There has been a sameness of quantity, *tempo*, manner, matter, or quality.

From this it would need no very daring reasoner to conclude that the "sameness" probably caused the dullness, and that consequently one might banish the dullness by

removing the "sameness," introducing change and contrast in its place. As a matter of fact, this is the case. Variety of phrasing and of expression is absolutely necessary if the singer is to hold the attention of his audience.

Having arrived, then, at the conclusion that if a vocalist is to hold the attention of the listener by appealing to the intellect instead of merely to the ear his singing must exhibit constant change and contrast, let us investigate the various ways in which this result may be obtained in Phrasing and Expression.

Sir Charles Santley, whose name has been ever associated with what is highest and best in music, defines phrasing in the following terms :—

"It is the art of correctly distinguishing the outlines and periods which, so to speak, serve to represent the melody in relief. For the singer it consists in taking breath at the proper time and place, so that the phrase may appear executed as a single whole. This," he adds, "can only come from practice under the guidance of experienced masters."

Certainly without good phrasing there can be no beauty of singing from an artistic point

of view, and only those artists who have properly studied it can possibly expect to reveal the inmost meaning of the composer. A phrase is practically a musical sentence; there must be proper accentuation of certain notes which are meant to stand out, and there must be various degrees of force, otherwise the passage will be without meaning.

This brings us to a consideration of the methods by which variety may be obtained in singing.

(a) *Changes in the volume of sound.*—There are five alternatives—*fortissimo*, *forte*, *mezzo-forte*, *piano*, *pianissimo*, and the choice of these must be subject to the feeling of the music and poetry. I have said that there are five, but the possible gradations of tone lying between the two limits, *pianissimo* and *fortissimo*, are more or less indefinite. To obtain full command over them it is necessary to practise the *messa di voce*, or, as it is usually termed, “swelled” note, though it would be more completely described as a “swelled-and-diminished” note.

Whenever a long note occurs in a composition it should be treated in one of three ways: either it should increase from *piano* to *forte*,

or commencing *forte* die away to *pianissimo*, or be sung as a *messa di voce*.

(b) *Changes in tempo*.—These must be made with the utmost discretion. To launch out into making perpetual little alterations in time throughout the piece, quickening here, slowing up there, without rhyme or reason, is the sign of a poor singer. The great artist is a great timist, and is found to interfere but little with the *tempo* of a piece. Consequently, when he does so, he produces a marked effect. It is necessary to make up the mind in advance where the words and music seem to demand a quickening or retarding of the time, or a pausing on some note. When one is satisfied that this alteration will be effective, and at the same time artistic—not a mere claptrap attempt to gain the vulgar applause of the ignorant—then let there be no half measures; make the change definite, steady, and pronounced.

Tempo rubato does not properly come under this head, since the displacement of values occurs in the melody alone. The accompaniment is kept strictly to time throughout, the lengthening of certain syllables being equalised

by the shortening of others. It is a style of singing principally useful for the interpretation of strong feeling, being governed by the accent which is given in ordinary speech. The subject will be referred to later under another heading.

(c) *Changes in melody.* — When a passage of notes occurs a second time during a song it is sometimes advisable to make changes by the introduction of turns, *appogiature*, or trills, or by absolute alterations in the melody. The latter alternative must, however, be adopted with the most irreproachable musical taste. It is but rarely resorted to, save in the old Italian music, where considerable latitude was not merely allowed to the singer, but almost expected of him. The accompanying examples will illustrate how the alterations may be made. They are typical of the many variants which the writer received from Señor Garcia during the four precious years spent under the *mæstro's* tuition. One occurs in the famous *Aria di Chiesa* of Stradella, the other in the principal baritone air in the *Nozze di Figaro*, *Vedrò, mentr' io sospiro*.

I. ORIGINAL MELODY.

Si - a dan - na - to - nel fuo - coe-
ter - no dal tu - o ri - gor.

TREATMENT OF SAME PASSAGE IN LAST VERSE.

Tempo rubato

Si - a dan - na - to - nel fuo - coe-
ter - no dal tu - o ri - gor.

II. ORIGINAL MELODY.

Per da - re a me tor - men-to - e
For - se ancor per ridere, per ridere di
mi - a in - fe - li - ci - tà.

SUBSEQUENT TREATMENT.

Per da - re a me tor - men-to - e
For - se ancor per ridere, per ridere di
mi - a in - fe - li - ci - tà.

So much for changes in melody. In addition to these there are certain possible

(d) *Changes in the manner of executing passages.*—(1) The *legato* is the most important of all, being the groundwork and dominant characteristic of all good vocalisation. In it the notes are connected one to another with grace and smoothness, flowing with distinctness and evenness.

The other four methods may be looked on as varieties of colouring:—(2) *marcato*, (3) *portamento*, (4) *staccato*, (5) *aspirato*. The mechanism by which these are produced is more suitably dealt with in a book containing exercises written for the acquirement of vocal technique.

(e) *Changes in phrasing.*—Alterations are often possible in breathing places, whereby the recurrence of a melody may receive fresh treatment. The choice of these, however, is subject to certain strict rules, which are accepted canons of artistic singing. Breath should not be taken in the middle of a word, between an adjective and its related noun, in the middle of a verb, or between any words which are intimately united by their gram-

matical sense. Consequently, the vocalist must replenish the breath only when the punctuation of words and music agrees. On the rare occasions when this is not possible, a half breath may be taken at a convenient place, but this must be done in such a way that it is not noticeable to the listener.

Perhaps the most artistic way of attaining this result is to take up the melody again with strongly-increased emphasis after breathing, since this suggests a natural reason for the pause. In ordinary conversation, and still more in acting or oratory, when it is intended to lay special stress upon a word, or to call particular attention to a phrase, it is often done by making a pause immediately before or after the word.

(*f*) *Changes in accentuation of phrases.*—Sims Reeves used to say, "A singer who does not recite or read the verses of a song aloud before attempting the music, will never become a great artist," and indeed it would be difficult to over-estimate the importance of this preliminary. Manuel Garcia himself draws special attention to it when he refers to the preparation of a piece.

"The vocalist," he says, "should read the words of the piece again and again till each finest shadow of meaning has been mastered. He must next recite them with perfect simplicity and self-abandonment. The accent of truth apparent in the voice when speaking naturally is the basis of expression in singing. Light and shade, accent, sentiment, all become eloquent and persuasive. The imitation of instinctive impulse must, therefore, be the object of his special preparation."

Seeing that a composer seeks his inspiration from the lines of the poet, and attempts to bring out in his music the various feelings which these have conveyed to him, it should be unnecessary to insist on the importance of every word being uttered by the vocalist with irreproachable distinctness. The listener should not have to strain his ears to catch one single phrase. Such was the singing of Sims Reeves, Edward Lloyd, and Charles Santley, of Patti, Trebelli, and Antoinette Sterling, to mention but a few names taken at random. When listening to such artists as these there was never a moment's doubt as to what had been sung. Clearness of enunciation, therefore, should be the aim of all. A book of words should

be as unnecessary in a concert-hall as a copy of the play at a theatre; or, at any rate, it should be necessary only for the giving of translations of German, French, or Italian songs for the assistance of members of the audience, who are unfamiliar with the languages.

In analysing the words of a song it must be borne in mind that nearly every sentence is susceptible of varying treatment as regards its accentuation. The principal stress may be laid on any one of several words, each of which will give the sentence a different shade of meaning. This fact gives the singer a way of finding variety when a line or phrase appears several times in the song.

Let us take as an illustration the well-known line in Lord Tennyson's exquisite poem, *Crossing the Bar*: "I hope to see my Pilot face to face."

If the stress be laid on the first word, it might convey at least two meanings, suggesting either that "Others do not hope to see Him, but I do," or else that "I too hope, as others hope." Which of these two was implied would be determined by the tone of voice in which it was said. This question of tone or *timbre*,

as conveying the different shades of expression, will be considered in the next and final section.

Now, by saying "I *hope* to see," we introduce an element of doubt. "I hope to *see*" suggests "I have always believed in His existence, but with death there will come the clearing up of all doubt." "I hope to see my *Pilot*" brings out the continuation of the metaphor drawn between dying and "putting out to sea," while the emphasis on "face to face" gives still another meaning.

These, then, are the possible accents in this particular line, and other phrases are capable of variation in a lesser or a greater degree. For instance, the sentence, "I thought she loved me," would have five distinct shades of meaning through the stress being laid on each of the five words in turn, quite apart from the further changes which could be suggested by introducing variations in the tone of voice. When several alternatives of stress are possible (the composer will have already eliminated some by applying certain words to the strong beats of the bar, others to the weak) the artistic powers of the singer are brought out by the way in

which he rejects some accentuations and retains others. The individuality of rendering finds perhaps most scope in the exercising of a wise choice over this and over the further question of tone-colour: that is to say, of—

(g) *Changes of timbre.* — It is well known that the speaking voice takes on a different “tone” and inflection according to our actual feelings at any particular time. Take, for instance, a single word such as “go.” Whether the utterance is prompted by love or hate, joy or grief, anger, fear, or any other feeling, nature imparts to the voice a distinct difference of quality accordingly.

One of the singer’s principal aims must be the cultivation of the power to recognise the quality of tone which results from every possible individual feeling. Then he must set himself to acquire absolute command over these various changes, so that he may be able to reproduce them at will, for vocal expression depends upon this power to a large extent. With this means at his command he will be able to give artistic expression to his singing, conveying to the listener a tone-picture of his feelings. He will, of course, have previously studied the words,

tried to penetrate the poet's inmost meaning, and decided what rendering he shall give, bearing in mind throughout that he must aim at variety of expression.

"Singing a song," Sims Reeves said, "is like painting a picture. The voice conveys to the mind the beauty and meaning of a song, as the eye conveys to the mind the beauty and meaning of a picture. But if the performer sings in one uniform colour of tone from beginning to end, the result is monotony and ineffectiveness. Light and shade in singing do not consist in making passages loud and soft alternately; they consist in using the various colours of the voice to suit the sentiment of the words. The *mezza-voce* is of great use in this respect."

To avoid monotony, then, one must analyse the poem, and if possible find some distinct change of feeling for each fresh group of ideas. It is not sufficient to ask oneself "what class of song is this? What is the primary feeling of the poet? Is it a note of love, of joy, of grief, of patriotism?"

Having settled that a song primarily denotes, say, love, we must go further and consider what it connotes. What, then, are the feelings which

anyone may experience when deeply in love? May he not be in turn wistful, gentle, tender, sympathetic, loving, passionate, hopeful that his love may be returned, fearful lest it be rejected? May he not grow anxious, jealous, angry, mocking; and may not this be followed by regret, pleading, happiness? There is, indeed, abundance of choice before one. Given the ability to reproduce the *timbre* or tone-colour suggesting the various feelings, there remains but the process of selecting and rejecting the various possibilities. The choice will depend on how far he is educated, refined, well-read, poetic, imaginative, and generally artistic.

Here, then, we have the field of study which lies before every singer who wishes to appeal to the intellect and to the artistic feeling of the audience. The voice is the gift of nature, the rest may be acquired by study.

If he would appeal to the *heart* of the hearer, that is another matter. To make others feel deeply, one must feel deeply oneself. There must be an electric current of sympathy flowing out to the listener, and this can be generated only by the singer himself.

The truth of nature alone can awake an

answer in the breasts of others. That indefinable something which grips, stirs, and moves to tears cannot be learned. It owes its origin to a power which is far beyond the control of man,

TEACHER AND PUPIL

CHAPTER XII

TEACHER AND PUPIL

MANUEL GARCIA is generally acknowledged to have been the greatest singing teacher of the nineteenth century. As such, it may afford interest to recall what he said to me one day on the subject of "Teacher and Pupil." I propose to supplement his remarks by a few words as to what are the methods adopted by all good teachers in the training of their pupils, and will conclude this little book by touching on a few points which may perhaps prove worthy of consideration. This is what Garcia said to me:—

"I only tell you how to sing, what tone is good, what faults are to be avoided, what is artistic, what inartistic. I try to awaken your intelligence, so that you may be able to criticise your own singing as severely as I do. I want you to listen to your voice, and to use your brain. If you find a difficulty, do not shirk it. Make up your mind to master it. So many

singers give up what they find hard. They think they are better off by leaving it and turning their attention to other things which come more easily. Do not be like them.

"In Paris once a number of boys were set some problems whilst competing for a prize at the Gymnase. One of them was seen to burst into tears, and on being asked why he did so, replied that the problems were too easy: he was afraid that all the others would be able to do them besides himself, so that he would be prevented from carrying off the prize. The master smiled, and told him to answer the questions by a more difficult method, if he knew one. He did so, and gained the first place.

"Many singers do the opposite. They burst into tears because they find a thing too hard. Do not be afraid to face a difficulty. Make up your mind to conquer it. I only direct you. If you do a thing badly, it is your fault, not mine. If you do it well, all praise to you, not to me. I show pupils how to sing, and the proper way to study. Suppose someone meets me out of doors and says, 'Can you tell me the way to Hampstead Heath?' I answer, 'I will walk there with you.' We set out, and I keep by his side, saying, 'This is the street we have to pass through. Do not turn down there: that goes in the wrong direction. Follow my instruction and you will arrive at your destination. I know the road well.' If he takes the wrong turning, that is his fault, not mine. I

cannot prevent him from going off into the slums. I can only say, 'Do not go there—that is wrong.' He may follow my advice or not, as he chooses. Again, if we come to a very steep hill, and he says, 'I can't climb that—it is too difficult. Let us not go up—I am tired;' I can only reply, 'If you wish to reach the Heath, you *must* climb it. There is no other way of getting to your destination.' But if he is lazy, and will not mount it by his own endeavour, I cannot lift him and carry him upon my shoulders."

The teacher as regards his position towards his pupils cannot be too deeply impressed with a sense of his own responsibility and trust. He will during the training find himself placed in a position similar to that of a doctor towards a patient, and must show himself unfailingly worthy of the confidence placed in him. Like Cæsar's wife, he must be "above suspicion" in all his dealings. At the very outset where a novice comes to him, not proposing to take up singing merely as a pastime, but anxious to adopt the musical profession, the teacher must weigh well what he says, and realise the responsibility of advising an entry into a profession already over-crowded and demanding exceptional voice and talents to ensure success. He

must speak the truth, and lay before the intending pupil the actual facts of the case, with the difficulties to be encountered and the qualifications necessary for the successful singer to possess—those qualifications, other than mere voice, on which I have attempted to touch in the opening chapter.

When the pupil comes for the first lesson, it is always best to give him a brief *resumé* of the singer's aims, of the field to be covered, and of the general mechanism of the voice and principles on which it works, such material as I have dealt with in the second chapter. As to the many details and more intricate matters which will subsequently require explanation, the teacher will do well to leave these until they crop up later during the lessons.

Singing is an art: let the teacher be careful not to make it appear a "Black art." By this I mean, let the pupil be encouraged to ask questions, whenever difficulties arise or whenever any phenomenon occurs which seems to demand an explanation. The technical side of singing rests on a scientific basis, the artistic side on certain broad principles, and the teacher should not attempt to wrap in mystery those

things about which no mystery is really attaching. Let him avoid scientific or technical terms as far as possible, and where it is necessary to use them, let him supplement them by a simple explanation, seeking for some illustration from the common phenomena of everyday life which will bring the matter before the pupil's eyes with vivid clearness. Let him clear up all questions as far as possible as he goes along, for points which are once misunderstood will only continue to crop up again and again in the future, causing endless confusion.

A teacher, to be successful, must have been a good vocalist himself; he must be able to show the pupil with his own voice what to do and what not to do. As the old Italian *mæstro* Peregrino Benelli said: "Per un cantante necessario un mæstro che sia buon cantante." ["It is necessary for a singer to have a master who is himself a good singer."] He must be able to show with his own voice the difference between singing with too much pressure of breath and with the proper amount, between ringing and veiled tones, open and rounded notes; and in addition he must be something of a mimic—able to reproduce the various faults

of his pupils, always exaggerating them somewhat in order to make them more noticeable. As a good doctor is able to tell from the patient's symptoms what is the nature of his illness, and what parts of the interior organs are affected, so too a good teacher should be able to tell from the quality of tone emitted what faults are being made. He must be able to recognise unerringly all the possible differences of tone, good or bad, and he must have complete knowledge ready at his finger-tips of the best method by which a faulty tone may be corrected and the weak spots in a voice strengthened. He should, moreover, make a practice of explaining the exact cause of every defect, the exact reason for every correction, the exact results aimed at by every exercise. There must be no working in the dark on the part of the pupil. Everything which is done throughout the training has a reason, technical or artistic, and there is nothing gained by concealing it.

One of the most important things to be realised by a teacher is that pupils will be found to differ, both in voice and in temperament. Consequently, they must not all be treated alike. There cannot be any hard and fast method of

training. There are certain general principles to be followed, but these should be adapted to the capacity of the individual and to the special peculiarities of his voice. The teacher must aim in all cases at developing a well-equalised voice, firm, strong, flexible, of good compass and of perfect intonation, but in order to attain these results, he will have to treat each individual voice differently. By his knowledge he will be able to make the most of the pupil's material, strengthen it where it shows signs of weakness, and do all that is possible to conceal the deficiencies. For instance, where the voice proves unable to sustain *fortissimo* effects in the higher notes, he will point out how in the interpretation of a song it may be feasible to treat a passage in such a way that the expression chosen will call for softer musical effects.

Moreover, he may take advantage of the fact that every effect is one of contrast. Supposing the pupil has to execute a *fortissimo arpeggio* *C, E, G*, in which the top *G* is the climax of the phrase, but he is unable to sing *fortissimo* above *F*. What must be done? He must sing out well, but keep the *E* down to an *mf*, so that the *G* given *forte* will be the climax, and will

stand out as almost a *ff* in contrast to the comparative weakness of the lower notes. If the pupil were to give a full *ff* *E*, as he might well be tempted to do, the *G* would in contrast by being given *f* appear almost *mf*, and certainly the climax of the phrase would appear on the wrong note. Art, then, will in this case, as in many others, enable the singer to take the fullest advantage of his material and to triumph over those natural weaknesses which may have proved otherwise insurmountable. Similar treatment in low passages will enable a bottom note taken *mf* to appear stronger than it really is, by making the notes leading down to it *p*.

In the treatment of pupils, again, allowance must be made for individual characteristics, some pupils merely requiring to be led, others requiring to be coaxed, and others still to be driven. Let the teacher remember that everyone who passes through his hands will be a lasting testimonial to his teaching, either a recommendation or the reverse.

The teacher should be most careful never to make any remarks as to the methods of a fellow - teacher. If a new pupil arrives fresh from another master, with faults which should

have been eradicated, let the teacher do his best to correct these faults as soon as possible, but let him make no remarks. Should he be unable to say anything in praise of the previous instructor, let him emulate the example of Brer Fox in "Uncle Remus," who, it will be remembered, "lay low, and said nuthen." His skill will be best shown by his method of conducting exercises, and of adapting himself to circumstances. He should, as far as possible, avoid the use of scientific terms; above all, where he finds that a pupil can do anything correctly at once without difficulty (*e.g.*, breathing, taking a swelled note, or rounding a vowel), let him pass the matter over without any explanation of the mechanism by which the effect has been obtained, for otherwise he will merely make the singer self-conscious, without much possible good, and with very probable harm resulting.

A most important matter is the method of helping a pupil to overcome difficulties. Where a passage in a song cannot be given with ease, analyse it and discover exactly where the hitch occurs. It will be probably found among the following, if it be not caused by faulty emission.

(1.) *Lack of breath.* — The phrase may be too long to be done comfortably on a single breath. If so, divide the passage and let a half breath be taken at the suitable point. The extra breath must be taken somewhere between the grouping of the words, at a place, that is to say, where one might naturally make a slight pause, if one were speaking the sentence.

(2.) *Awkward musical intervals.* — In this case, take the phrase as a *vocalise* on the vowel *A*. Upon discovering exactly the notes on which the difficulty occurs, it is a good plan to form an exercise of the 4, 6, or 8 notes, as the case may be, up and down the scale.

(3.) *Difficulty of articulation.* — In this case, take the words without the music, and repeat them several times, until the trouble has been surmounted.

(4.) *Difficult vowel.* — There may be a high note or series of high notes on a word whose vowel-sound makes it hard to sing broadly and effectively, for instance, the short *i* in such words as "hidden." Where this is the case there are three possibilities.

(a) Abandon all idea of getting a really

broad effect, and merely introduce as much roundness into the vowel as can be managed.

(b) Rearrange the words, so that the high note may occur on a word with a vowel that will allow of full broad treatment (*A* or *O*).

(c) Introduce an exclamatory "Ah" on the high note.

The last is specially suitable to the treatment of Italian music.

The teacher will sometimes find himself confronted with a certain difficulty in classifying the voice of a pupil at the earlier lessons, especially when it is as yet quite untrained, and is in a very undeveloped condition. Voices are classified according to their quality instead of range, but this natural tone-colour is sometimes not at once immediately apparent. In such cases considerable caution must be displayed, and for the first few lessons the pupil should be limited to a range of six notes, a hexachord, in the middle part of the voice, the principal work being confined to eradicating faults of emission. Increase of compass should be temporarily postponed. It will be quite

easily seen on trying the voice which hexachord the pupil can sing on with greatest ease and freedom, and these notes will be found to have more natural fullness than those outside that range. In the case of a male voice, from the *A* below *middle C* to a sixth below will probably be found best; and in a female voice, from the *E_b* above *middle C* to a sixth above. After a few lessons, a few weeks at most, the *timbre* will become more pronounced, and after taking some higher notes *piano* for a time, the actual classification of the voice will make itself apparent, when the normal development of compass and of *forte* and *fortissimo* may take place.

It is a great mistake to study entirely on the vowel *A*, which is apt to develop an unpleasant throaty quality of voice. The other vowels should be practised as well, for the *O* develops richness in the voice, the *U* places the voice forward, while the *I*, calling for a high position of the tongue, prevents the root of the tongue pressing on the epiglottis and causing guttural quality. The *E* is not so useful as the others, but must be studied equally with the rest, since it is one of the

most necessary vowel-sounds when we come to songs.

Here I must say a few words as to the methods to be adopted by a pupil in practice. The question is often asked, "When ought I to practise, and how long?" Mr Bach recalls how Bernacchi in the old days drew out the following time-table for the guidance of his pupils:—

After breakfast. Scales 5 minutes, pause 15 minutes.

"	10	"	"	"	"
Solfeggi	15	"	"	30	"
"	30	"	Walk.		

Two hours after dinner. (Afternoon.)

Scales 10 minutes, pause 10 minutes.

Solfeggi	10	"	"	10	"
"	10	"	"	"	"
"	30	"	Walk.		

It must, however, be remembered that this referred to a country where the heavy meal was taken in the middle-day, and, of course, such a time-table practically precluded pupils from doing anything else during the day. What may be recommended for present-day conditions is that a student during the first month of tuition should practise 15 minutes a day about an hour and a half after breakfast.

During the second month a second period of 15 minutes may be added late in the afternoon. With the third month, these may each be increased to 30 minutes. After six months' tuition three half-hours may be substituted, but only if this can be done without a feeling of fatigue in the throat resulting. This period of one - and - a - half hours is all that should be devoted to the actual exercise of the voice, though additional time will be spent over mental study, the preparation of new songs and acquiring knowledge of the principal operas, etc.

During the periods devoted to practice the entire attention must be given to the subject; there should be concentration on the work in hand, and an attempt made to overcome those faults of emission which have been pointed out by the teacher. The mind should not be allowed to wander to outside subjects. There must be constantly present the determination to persevere and to overcome all obstacles. Exercises should be practised in various keys (provided that these lie in the compass of the voice), on the various vowels and at various degrees of power, *p*, *mf*, and *f*, while, after a true *legato* has been obtained, the exercises

may be sometimes varied by *staccato* and *marcato*. For the acquirement of execution the best method is to work with a metronome, which may be slightly advanced each week, so that imperceptibly the scales and other passages may be sung with increasing speed, till they reach $\text{♩} = 132$, or even more. Beware of over-practice, since this will have worse results than under-practice. The latter can easily be corrected; the former if persisted in destroys that velvety quality of the voice which is the priceless possession of the singer. When, therefore, the throat feels tired, abandon further practice for the time being, and do not continue it till some hours, or, if necessary, some days later, when the tiredness has vanished.

While practising it is best not to sit at the piano, as the breathing can never be properly accomplished in this position. Stand upright, with the body well planted on the feet, keeping the head erect and shoulders back; let the face be calm, and direct the voice slightly upwards instead of straight in front; but in doing so be careful not to stretch the throat. It is always advisable to keep some little distance from the piano, where there is an accompanist to practise

with you, for in this way you will learn to be independent of the instrument.

During singing, both in body and in mind, one should be healthy and free from restraint. The reason for waiting till an hour and a half, or even two hours, after a meal before using the voice is that, in order to breathe properly, the abdomen should be empty, so as not to interfere with the action of the lungs and the diaphragm. To sing soon after a meal would not only prevent satisfactory breathing, but would interfere with the digestion.

As to the length of training required by a professional singer, a minimum of three years is necessary, while four or five should be taken if possible. While it is excellent to read books upon the subject, it must be quite realised that this method of acquiring knowledge can only be of use in combination with actual training under a teacher. It can supplement, but can never take the place of aural instruction. The pupil, however, will be well advised to leave text-books alone until after two years' study, otherwise their perusal will tend to confuse rather than assist the student.

It should be unnecessary to point out, that

from the very commencement of his training he should put himself under one of the best masters available. To spend a year or two under someone who is a poor teacher, because of the saving in fees, with the idea of spending the final months of training under a good teacher is not only false economy but absolutely throwing away money. Unless a singer is taught on proper principles from the very commencement, so much harm may be done in the year or two with a bad teacher that he will come on to the first-rate master in a worse state than he would have been at the start. Instead of finishing studies, the teacher will have to commence all over again from the beginning, with the additional difficulty that he will have to break down bad habits, instead of merely eradicating bad tendencies. Consequently, it will be seen that early lessons under a second-rate teacher, so far from shortening the time of tuition necessary under a first-rate master may actually lengthen it.

In conclusion, I will give two quotations from the writings of my dear old *mæstro*, Manuel Garcia, quotations which cannot fail to be helpful to every student. The first gives some

practical advice upon the subject of singing in a large building; the second embodies some valuable hints on the use of expression in singing:—

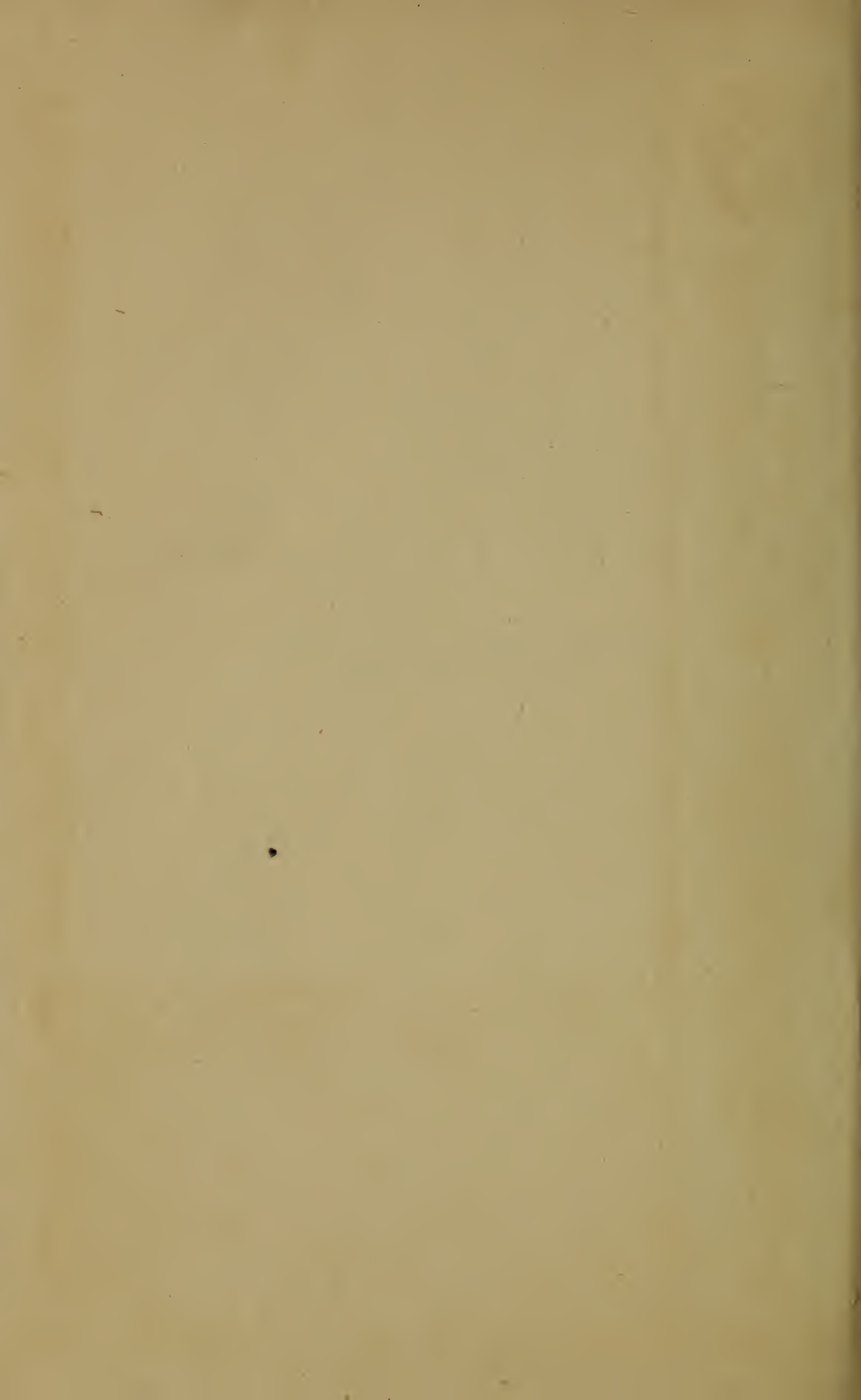
(A) “The only way of increasing the distance at which the voice will be heard is in sustaining it by the supply of a moderate but continuous current of breath. Only regular and prolonged pressure can put into vibration the whole mass of air contained in a vast place.

(B) “Expression is the manifestation of the feelings. Art comprehends all means, but employs only those suitable to special requirements. The severe and intelligent choice of means and effects constitutes what is called unity, which may be defined as a perfect accord of the parts of a whole. The science which thus converges efforts to one common end is based on the exact understanding of the comparative value of ideas. Nature attaches to every sentiment a characteristic accent. To threaten or entreat in other *timbre* and other modulations than those suitable to menace or prayer, far from exciting fear or compassion, would simply give occasion for mirth. Each individual has also a distinctive manner of expression, which alone is truthful and impressive. Age, habits, organisation, surroundings, modify a similar sentiment in different people, and the artist must vary his colour accordingly. He can only transmit his emotions to an audience by

feeling strongly himself. Sympathy is the sole transmitter of emotion, and the feelings of an audience are excited by our own, as the vibrations of one instrument are awakened by the vibrations of another!"

. THE END

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